HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

SVR-3000 RMT-V303

US Model

ORIGINAL MANUAL ISSUE DATE: 12/2002

ALL REVISIONS AND UPDATES TO THE ORIGINAL MANUAL ARE APPENDED TO THE END OF THE PDF FILE.

REVISION DATE	REVISION TYPE	SUBJECT
12/2002	No revisions or updates are applicable at this time.	
12/2002	Correction-1	Added P/N for Battery Cover (Replaced Page 54)
1/2003	Correction-2	IC600 added to Electrical Parts List

Design and specifications are subject to change without notice.

DIGITAL NETWORK RECORDER

SONY®

9-965-936-03

Self Diagnosis
Supported model

SERVICE MANUAL

SVR-3000 RMT-V303

US Model

MUTING
TV
POWER
CLEAR
ENTER
JUMP
LIST
LIVE TV
GUIDE
SELECT
PLAY
SLOW
BACK
PAUSE
FWD
REPLAY
REC ON/OFF
ADVANCE
VOL
CH
PAGE
RMT-V303
SONY

DIGITAL NETWORK RECORDER SVR-3000
SONY

SVR-3000

RMT-V303

SPECIFICATIONS

Inputs and Outputs:

Video In: S-Video 4-pin mini DIN (1)
Composite Video RCA (1)
Video Out: S-Video 4-pin mini DIN (2)
Composite Video RCA (2)
Audio Line In: Stereo L/R RCA (1 pair)
Audio Line Out: Stereo L/R RCA (2 pairs)
RF In: F-Connector Female (1)
RF Out: F-Connector Female (1)
Telephone: RJ-11 Female, 2 wire (1)
Control Out: 3.5 mm Mini Jack Sockets (2)

General: Accessories:

Power Requirements: 120 V AC, 60 Hz
Power Consumption: 29 W
Operating Temperature: 21°C to 45°C (70°F to 113°F)
Operating Humidity: 5% to 80%
Dimensions: Approx. 430 x 77 x 326 mm (w/h/d)
Approx. $17^{1/4}$ x $3^{7/8}$ x $12^{1/8}$ (w/h/d)
(including projecting parts and controls)
Mass: Approx. 4.5 kg (9 lbs. 1 oz.)

Supplied Accessories:

- Remote Control (1)
- Size AA (R6) Batteries (2)
- Audio/Video Cable (1)
- IR Control Cable (two IR emitters) (2)
- Serial Control Cable (1)
- S-Video Cable (1)
- Phone Cord (1)
- Phone Splitter (1)

Design and specifications are subject to change without notice.

TiVo™

DIGITAL NETWORK RECORDER

SONY®

9-965-936-03

TABLE OF CONTENTS

SECTION TITLE PAGE
Warnings and Cautions 4
Safety Check-Out 5

SECTION 1: DISASSEMBLY 6
1-1. Top Cover Removal 6
1-2. Hard Disk and D.C. Fan Removal 6
1-3. MA-411 Board and PS-445 Board Removal 7
1-4. Front Panel Assembly Removal 7
1-5. Front Frame Removal 8
1-6. FL-127 Board and FR-188 Board Removal 8
1-7. Service Position 9

SECTION 2: DIAGRAMS 10
2-1. Circuit Boards Location 10
2-2. Printed Wiring Board and Schematic Diagram Information 10
2-3. Block Diagram 11
2-4. Schematic Diagrams and Supporting Information 12
System Power 12
System Clock & Reset for MA PWB 1-686-359-12 13
System Clock & Reset for MA PWB 1-686-359-13 14
NTSC Video Decoder 15
Tuner/MTS Stereo Decode & ADC 16
A/V Encoder SDRAM 17
MIPS CPU 18
Host Ctl, XPort, MPEG Decoder 19
System Memory 20
Media Switch ASIC 21
Flash/Therm Mgmt/RTC 22
IDE Interface for MA Board with IC 1000 23
IDE Interface for MA Board with IC 1002 24
Modem Chipset 25
Modem DAA 26
USB Host Control 27
NTSC Video Encoder 28
IR Cont 29
@Eshe 29
PS-449 Board Schematic Diagram 32
FL-127 Board Schematic Diagram 34
FR-134 Board Schematic Diagram 36

SECTION 3: EXPLODED VIEWS 38
3-1. Chassis 38

SECTION 4: ELECTRICAL PARTS LIST 39

WARNINGS AND CAUTIONS

CAUTION

Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.

⚠ SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

ATTENTION!!

Apres avoir deconnecte le cap de l'anode, court-circuiter l'anode du tube cathodique et celui de l'anode du cap au chassis metallique de l'appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d'eviter tout risque d'electrocution provenant d'un chássis sous tension, un transformateur d'isolement doit etre utilisé lors de tout dépannage. Le chássis de ce récepteur est directement raccordé à l'alimentation du secteur.

⚠ ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifies par une trame et par une marque ⚠ sur les schemas de principe, les vues explosees et les listes de pieces sont d'une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l'importance est critique pour la securite du fonctionnement sont identifies dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliampmeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

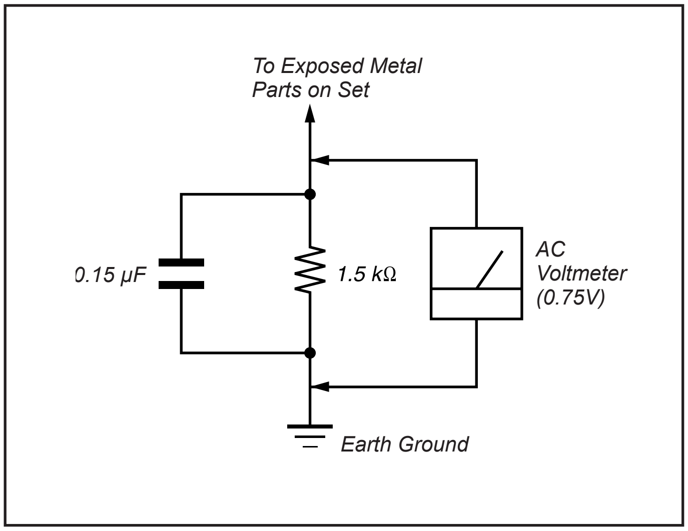


Figure A. Using an AC voltmeter to check AC leakage.

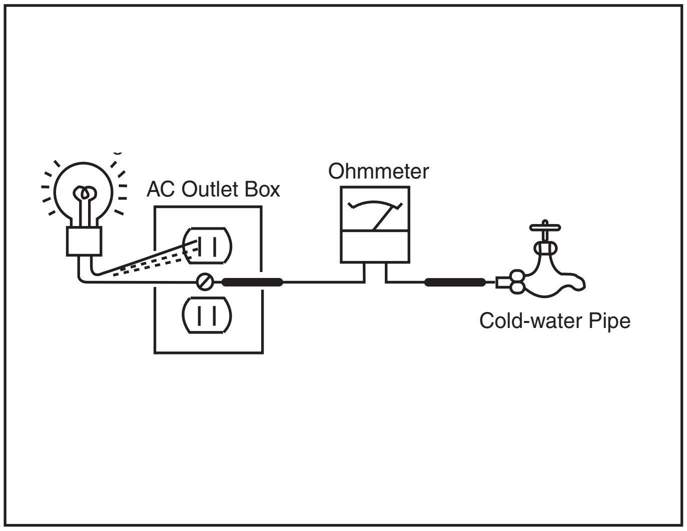
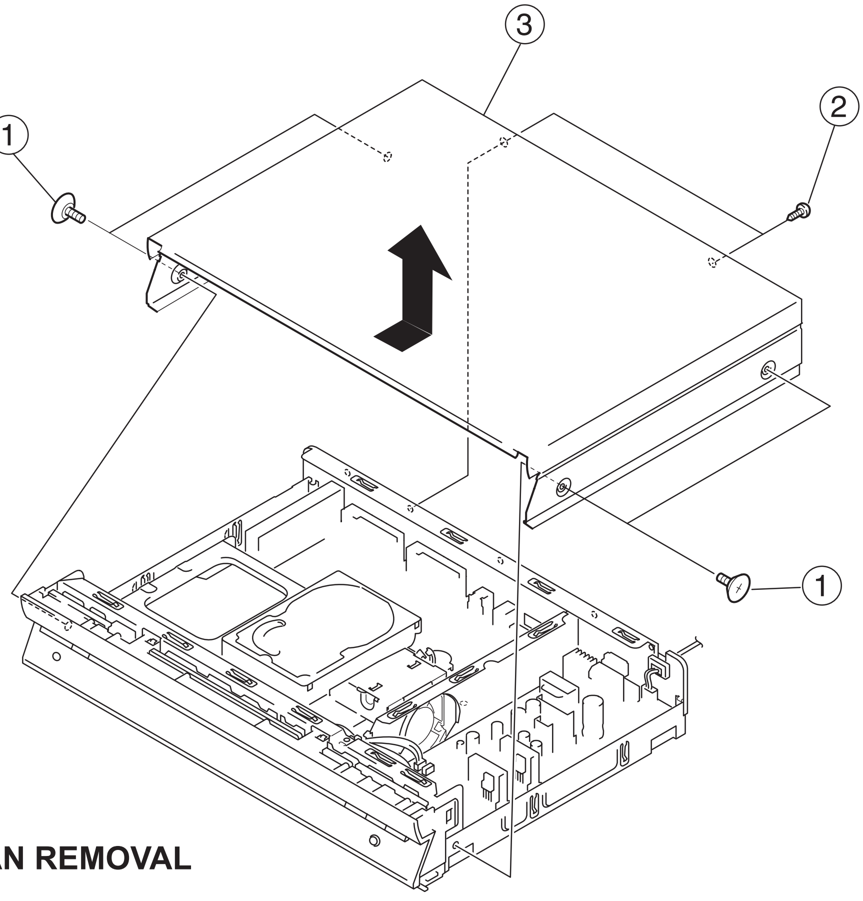


Figure B. Checking for earth ground.

SECTION 1: DISASSEMBLY

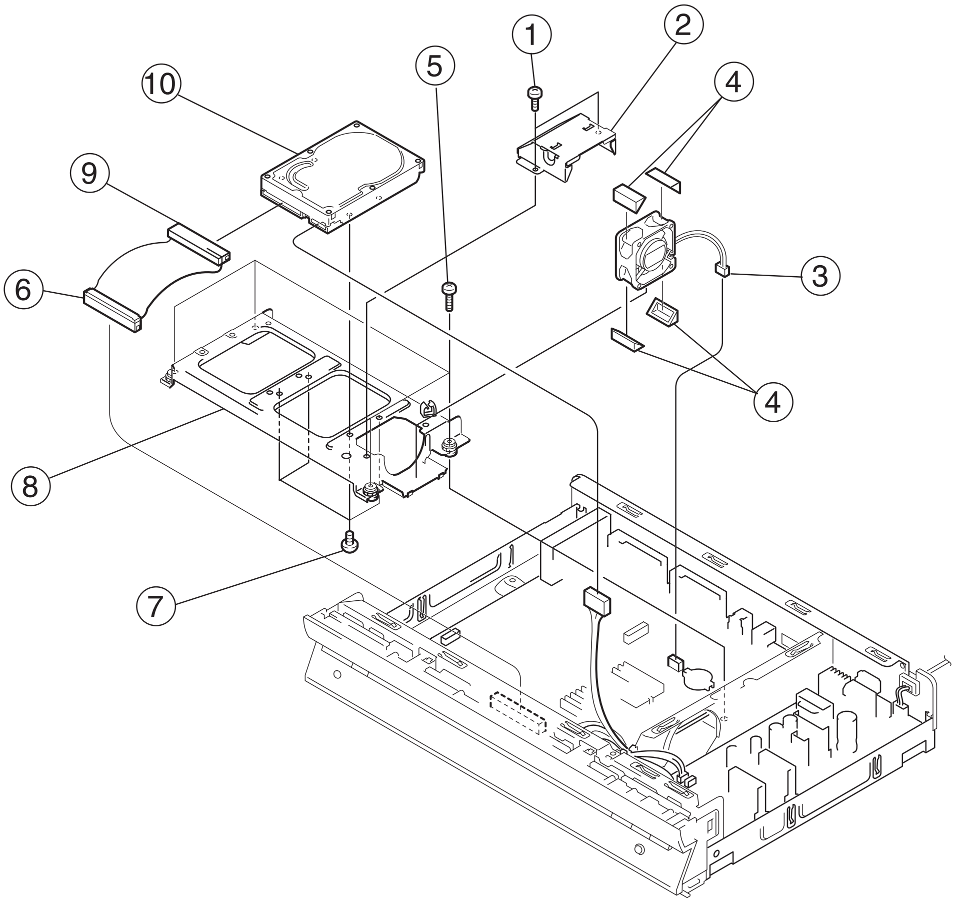
1-1. TOP COVER REMOVAL

1. Remove 4 screws (Tapping)
2. Remove 2 screws (+BVTP 3x10 Type 2 IT-3)
3. Remove top cover



1-2. HARD DISK AND D.C. FAN REMOVAL

1. Remove 2 screws (+BV IBR 3x8)
2. Remove Fitting (F) Bracket
3. Remove D.C. fan connector
4. Remove fan dampers
5. Remove 4 screws (+BV)
6. Detach harness (MH-111)
7. Remove 4 screws (Unified Screw 4.5)
8. Remove Bracket (DX), Fitting
9. Detach harness (MH-111) from hard disk
10. Remove hard disk



1-3. MA-411 BOARD AND PS-445 BOARD REMOVAL

① Detach Flat (FMF-002) Cable

② Disconnect harness (MP-132)

③ Disconnect harness (MP-133)

④ Remove 5 screws (+BV IBR 3x8)

⑤ Remove 1 screw (Screw +P 3x3)

⑥ Remove 5 screws (Screw +BV 3x10)

⑦ Remove MA-411 Board

⑧ Remove the Power Cord

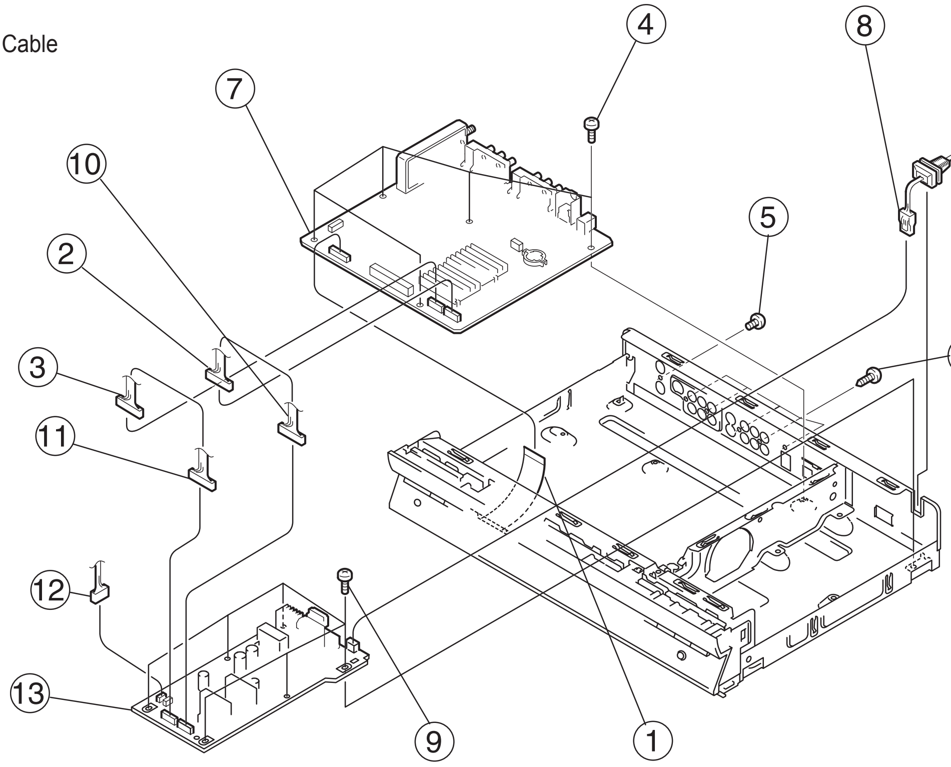
⑨ Remove 6 screws (+BV IBR 3x8)

⑩ Remove harness (MP-132)

⑪ Disconnect harness (MP-133)

⑫ Disconnect harness (HP-140)

⑬ Remove PS-445 Board

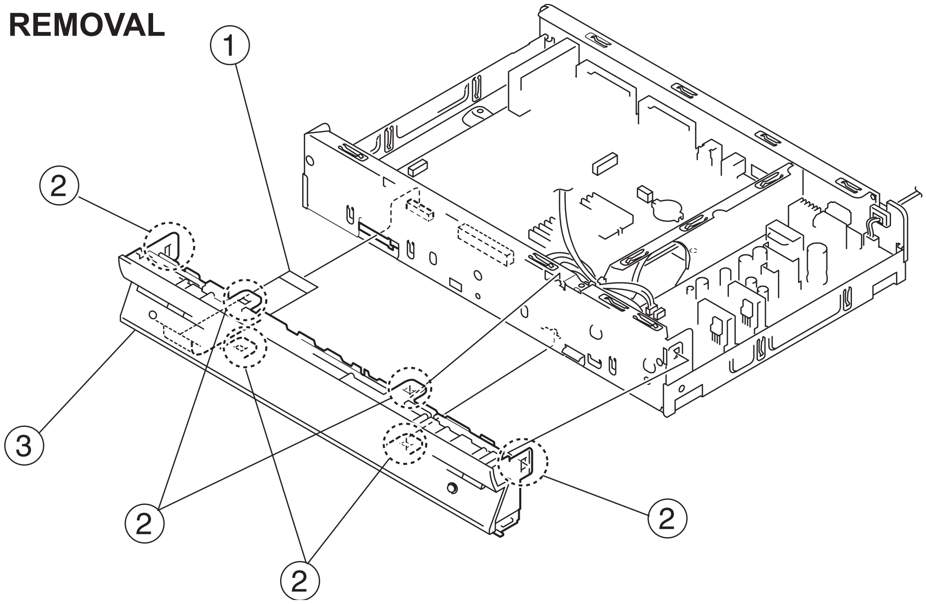


1-4. FRONT PANEL ASSEMBLY REMOVAL

① Detach Flat (FMF-001) Cable

② Release tabs

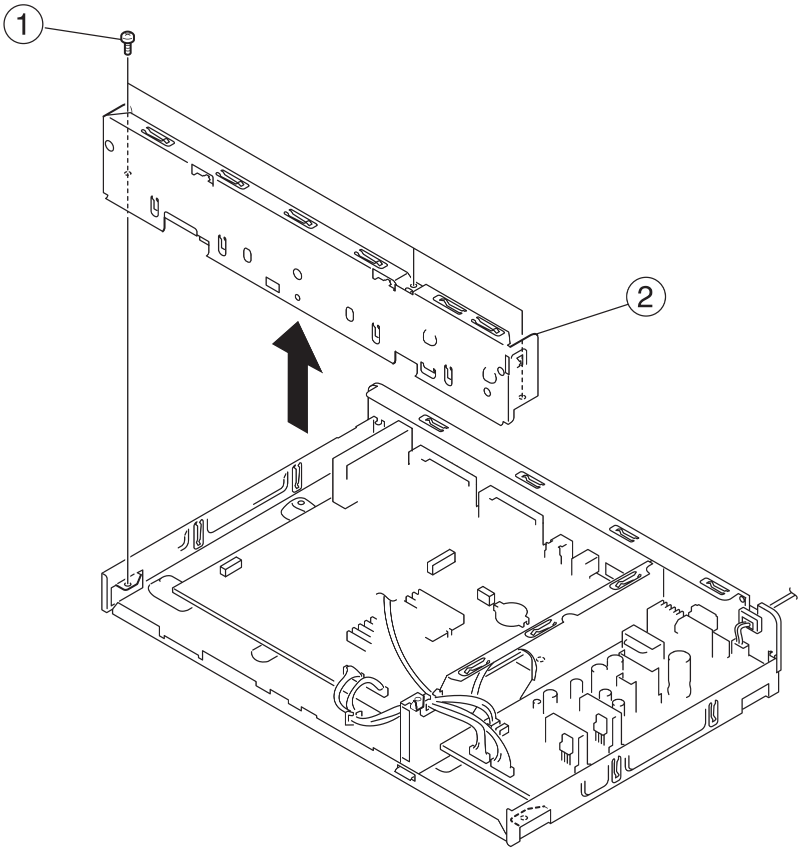
③ Gently pull off Front Panel Assembly



1-5. FRONT FRAME REMOVAL

① Remove 3 screws
(+BV IBR 3x8)

② Remove Front Frame



1-6. FL-127 BOARD AND FR-188 BOARD REMOVAL

① Remove 6 screws
(+BVTP 2.6x12)

② Disconnect Flat Cable

③ Remove Push Plate

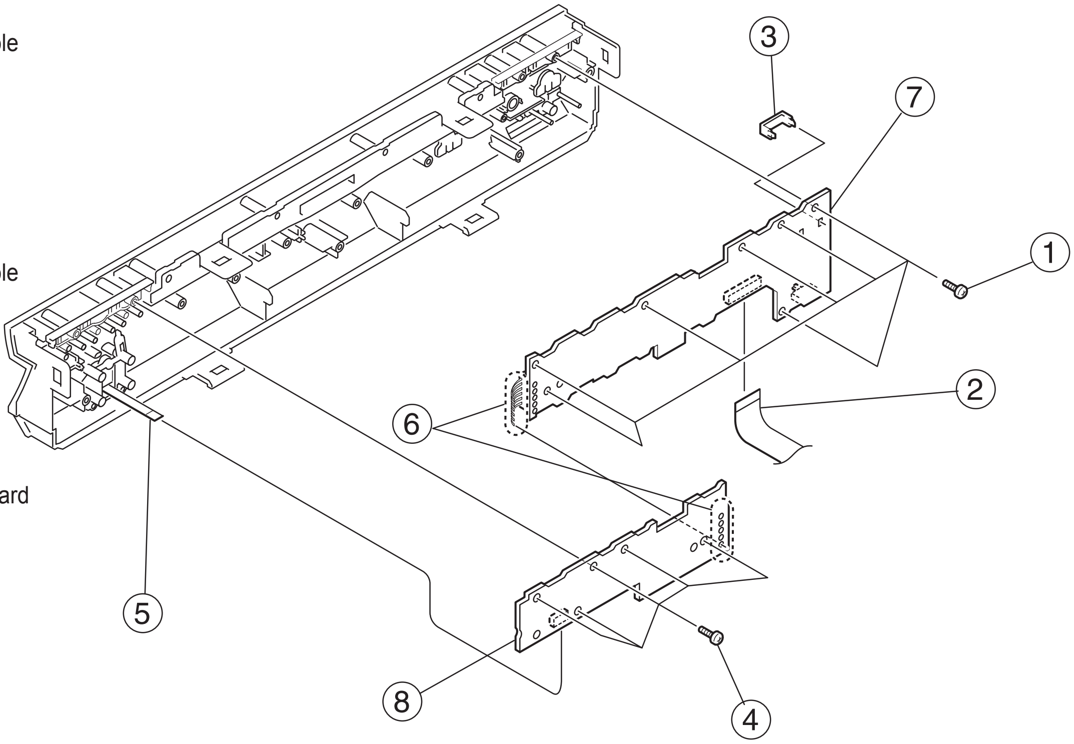
④ Remove 5 screws
(+BVTP 2.6x12)

⑤ Disconnect Flat Cable

⑥ Remove CN0402

⑦ Remove
FL-127 Board

⑧ Remove FR-188 Board



1-7. SERVICE POSITION

① Remove Top Cover

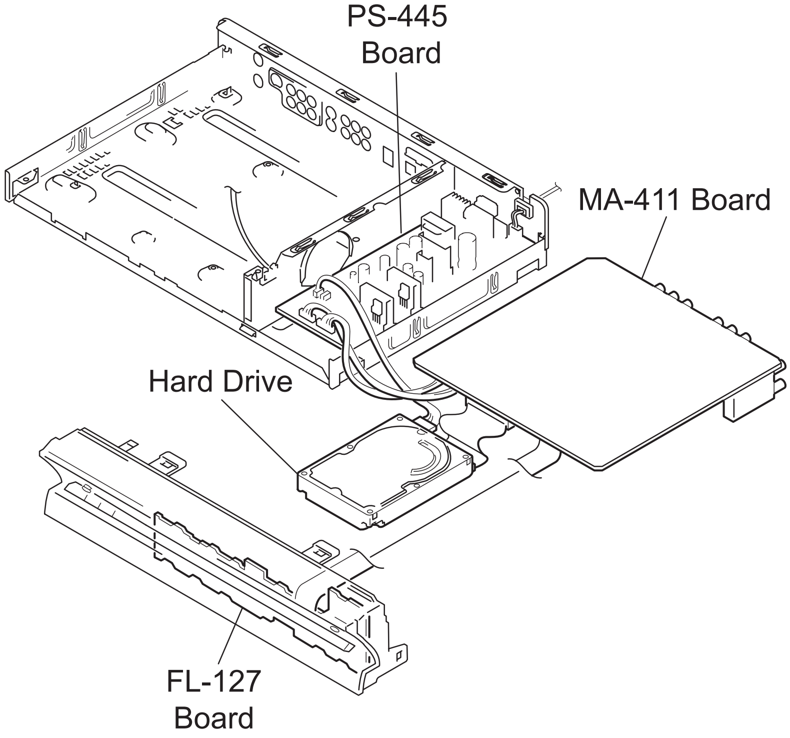
② Remove Hard Disk and Fan

③ Remove Boards

④ Remove Front Panel Assembly

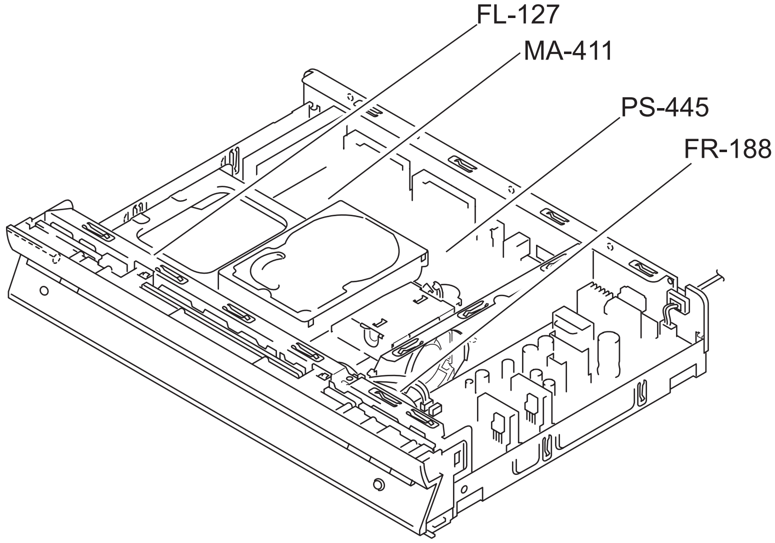
⑤ Remove Front Frame

⑥ Use the remote to operate the unit while in Service Position


PS-445 Board
MA-411 Board
Hard Drive
FL-127 Board

SECTION 2: DIAGRAMS

2-1. CIRCUIT BOARDS LOCATION



2-2. PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM INFORMATION

All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. kΩ=1000Ω, MΩ=1000kΩ

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm
Rating electrical power : $^1/_4$ W

$^1/_4$ W in resistance, $^1/_{10}$ W and $^1/_8$ W in chip resistance.

▭ : nonflammable resistor.

▭: fusible resistor.

Δ : internal component.

▭ : panel designation and adjustment for repair.

⊥ : earth ground

⏚ : earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a color-bar signal input.

Readings are taken with a 10MΩ digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibillity.

▬ ▬ ▬: B+line.

▬ ▬ ▬ V: B-line (Actual measured value may be different).

⇨: signal path (RF).

Circled numbers are waveform references.

The components identified by shading and ⚠ symbol are critical for safety. Replace only with part number specified.

The symbol ▮▭ indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole ▮▭ indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

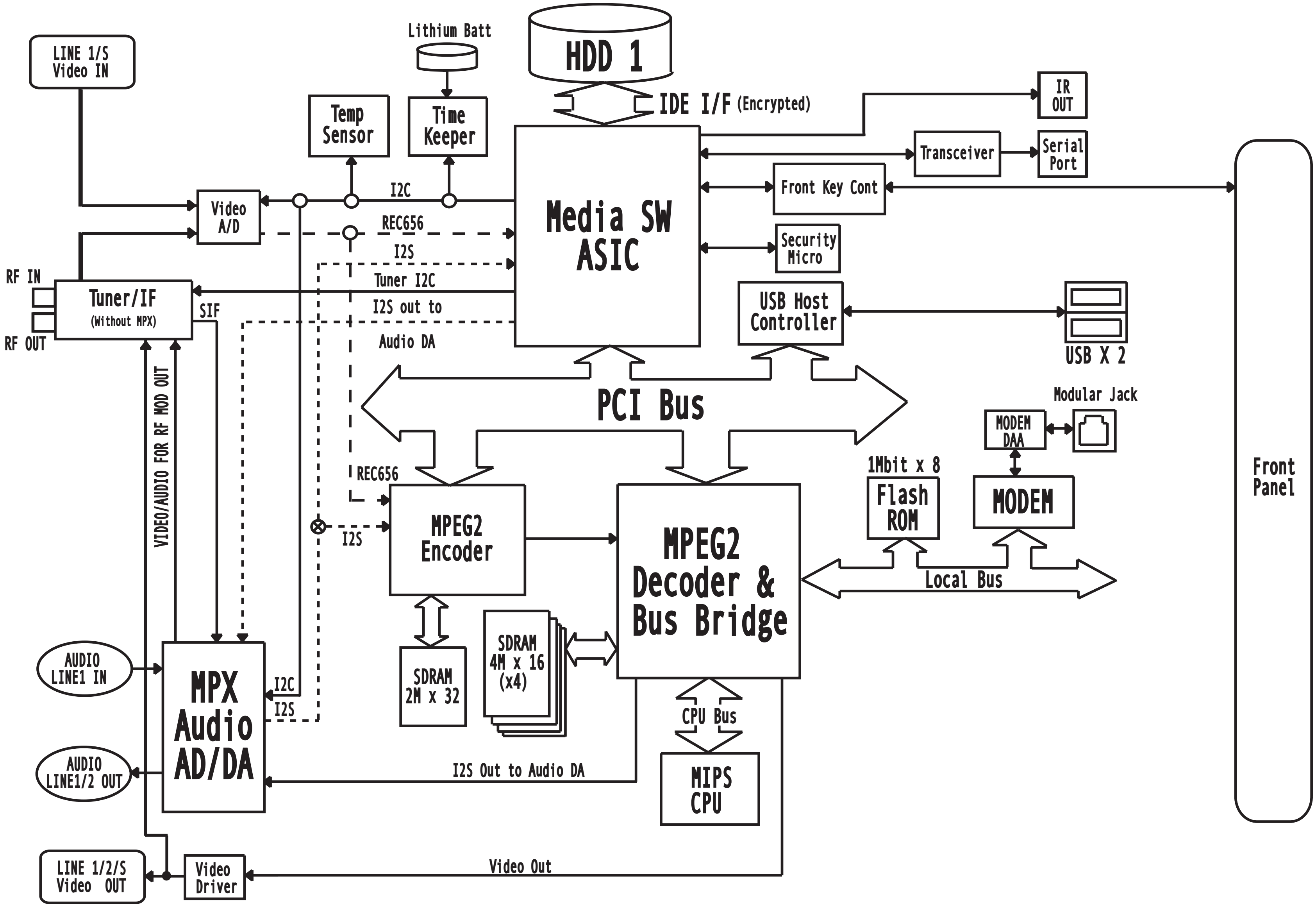
REFERENCE INFORMATION

RESISTOR	
: RN	METAL FILM
: RC	SOLID
: FPRD	NONFLAMMABLE CARBON
: FUSE	NONFLAMMABLE FUSIBLE
: RW	NONFLAMMABLE WIREWOUND
: RS	NONFLAMMABLE METAL OXIDE
: RB	NONFLAMMABLE CEMENT
: ✻	ADJUSTMENT RESISTOR

COIL	
: LF-8L	MICRO INDUCTOR

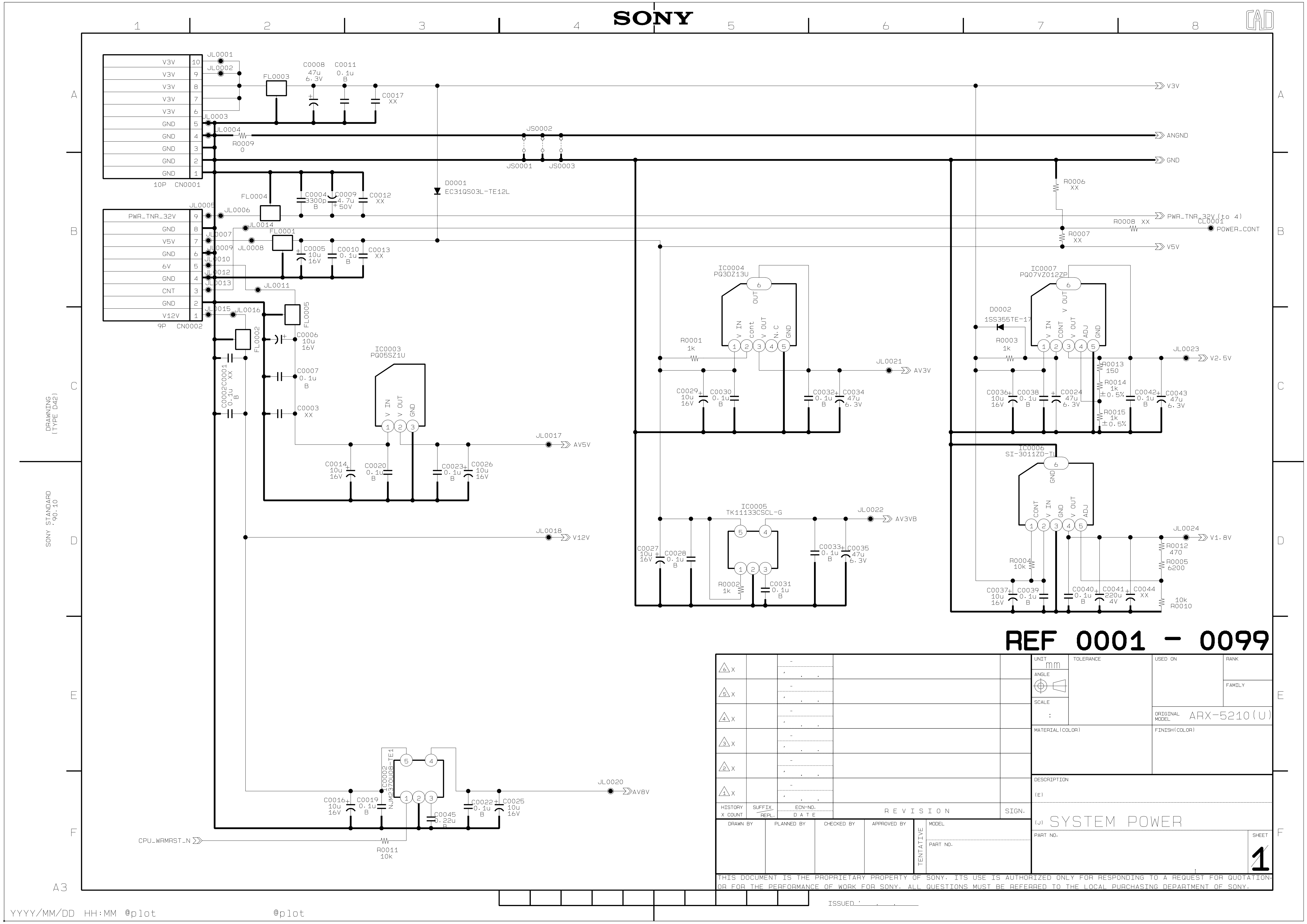
CAPACITOR	
: TA	TANTALUM
: PS	STYROL
: PP	POLYPROPYLENE
: PT	MYLAR
: MPS	METALIZED POLYESTER
: MPP	METALIZED POLYPROPYLENE
: ALB	BIPOLAR
: ALT	HIGH TEMPERATURE
: ALR	HIGH RIPPLE

2-3. BLOCK DIAGRAM

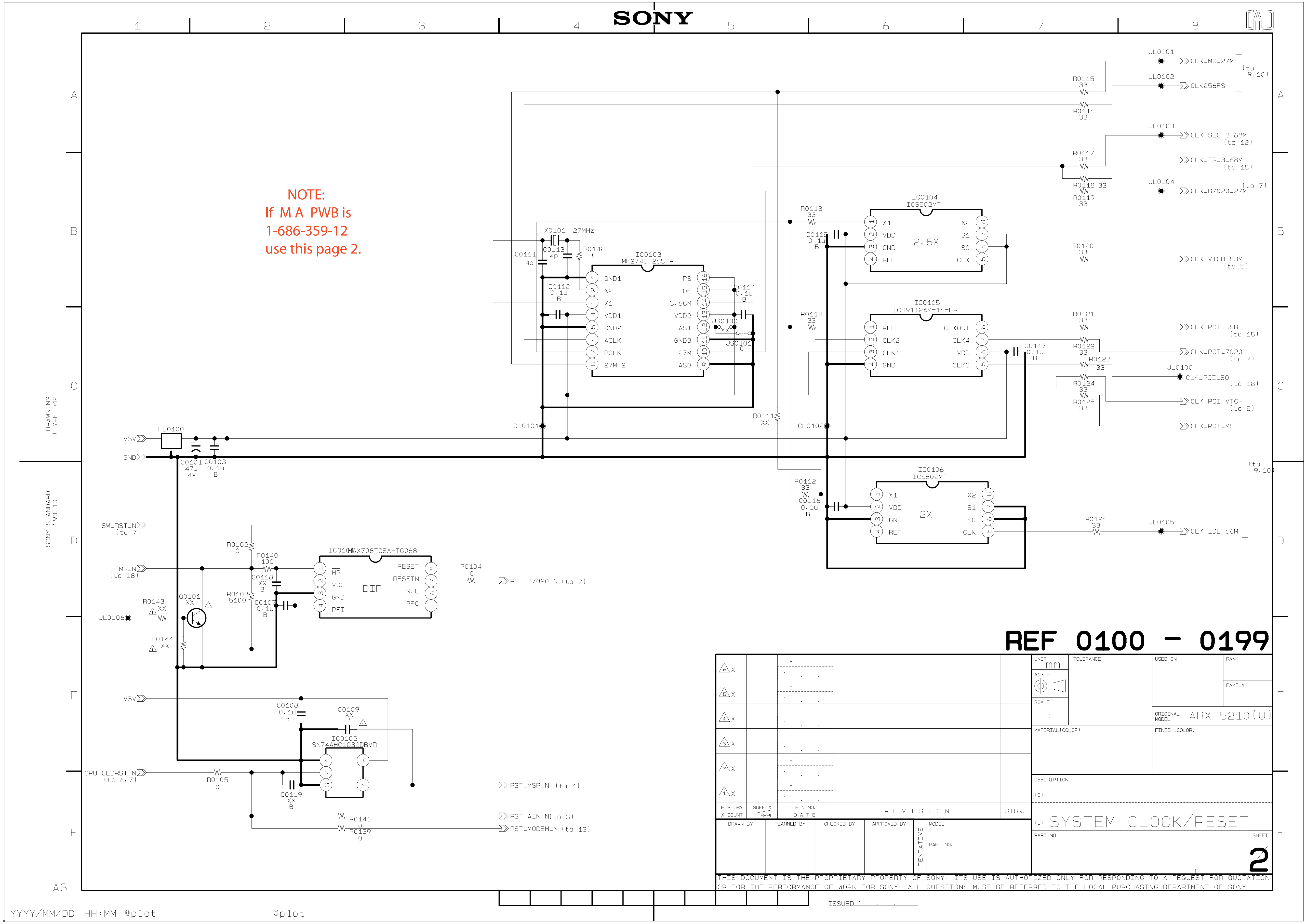

LINE 1/S Video IN
Lithium Batt
HDD 1
IDE I/F (Encrypted)
IR OUT
Temp Sensor
Time Keeper
Transceiver
Serial Port
Video A/D
I2C
Media SW ASIC
Front Key Cont
REC656
I2S
Security Micro
RF IN
Tuner I2C
Tuner/IF (Without MPX)
SIF
I2S out to Audio DA
USB Host Controller
RF OUT
USB X 2
VIDEO/AUDIO FOR RF MOD OUT
PCI Bus
Modular Jack
MODEM DAA
Front Panel
REC656
1Mbit x 8
Flash ROM
MODEM
MPEG2 Encoder
I2S
MPEG2 Decoder & Bus Bridge
Local Bus
SDRAM 4M x 16 (x4)
SDRAM 2M x 32
AUDIO LINE1 IN
MPX Audio AD/DA
I2C
I2S
CPU Bus
AUDIO LINE1/2 OUT
I2S Out to Audio DA
MIPS CPU
LINE 1/2/S Video OUT
Video Driver
Video Out

2-4. SCHEMATIC DIAGRAMS AND SUPPORTING INFORMATION

SYSTEM POWER

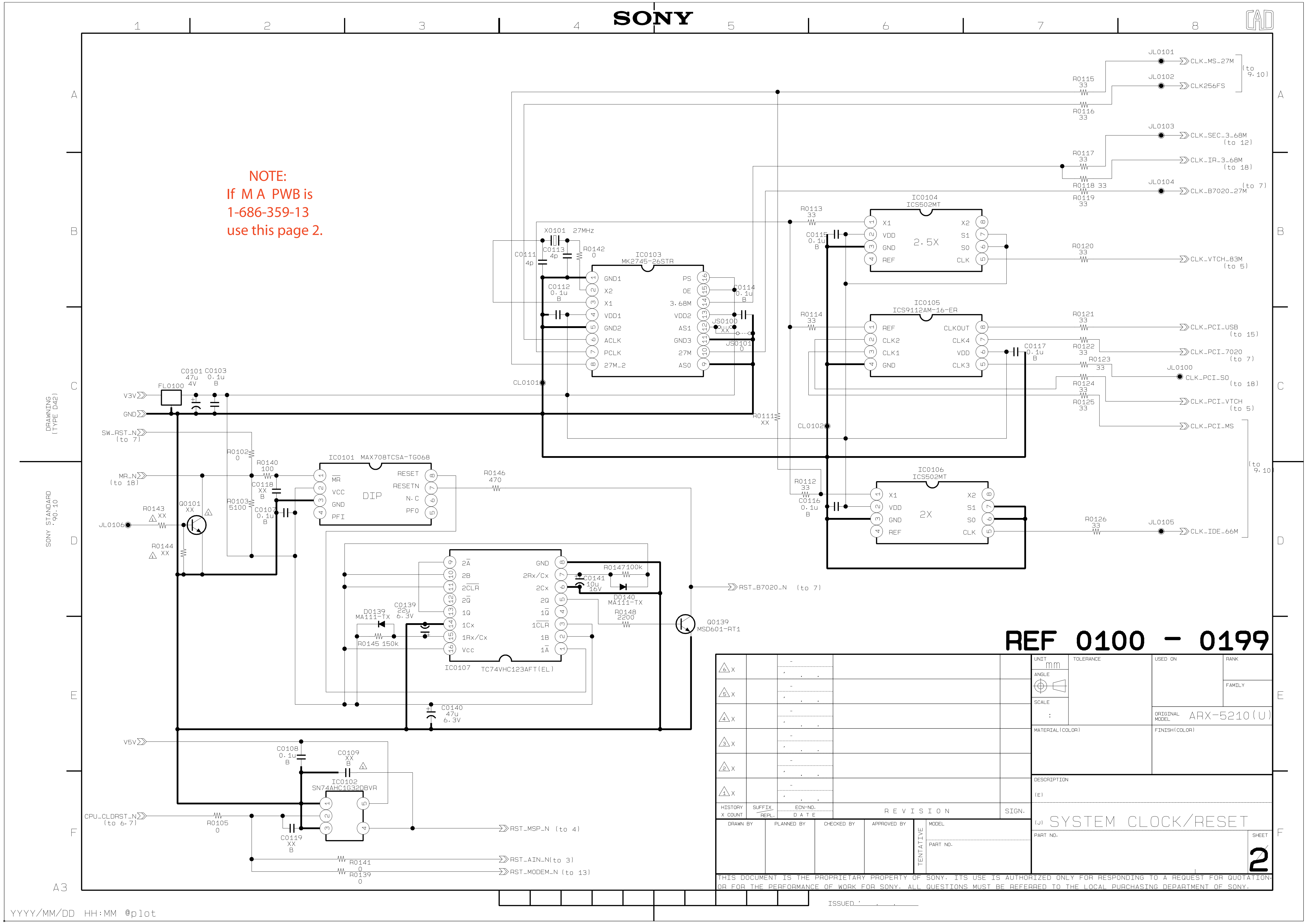

SONY
CN0001 10P
V3V
GND
CN0002 9P
PWR_TNR_32V
V5V
6V
CNT
V12V
IC0003 PQ05SZ1U
IC0004 PQ3DZ13U
IC0005 TK11133CSCL-G
IC0006 SI-3011ZD-TL
IC0007 PQ07VZ012ZP
IC0002 NJM2370U08-TE1
D0001 EC31QS03L-TE12L
D0002 1SS355TE-17
V3V
ANGND
GND
PWR_TNR_32V (to 4)
POWER_CONT
V5V
AV3V
V2.5V
AV5V
AV3VB
V12V
V1.8V
AV8V
CPU_WRMRST_N
REF 0001 - 0099
ARX-5210(U)
SYSTEM POWER
1
REVISION
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
A3
YYYY/MM/DD HH:MM @plot
@plot

SYSTEM CLOCK & RESET FOR MA PWB 1-686-359-12


SONY
CAD
1
2
3
4
5
6
7
8
A
B
C
D
E
F
JL0101
CLK_MS_27M
(to 9,10)
JL0102
CLK256FS
R0115 33
R0116 33
JL0103
CLK_SEC_3_68M (to 12)
R0117 33
CLK_IR_3_68M (to 18)
R0118 33
JL0104
CLK_B7020_27M (to 7)
R0119 33
IC0104 ICS502MT
X1
VDD
GND
REF
X2
S1
S0
CLK
2.5X
R0113 33
C0115 0.1u B
R0120 33
CLK_VTCH_83M (to 5)
X0101 27MHz
C0111 4p
C0113 4p
R0142 0
IC0103 MK2745-26STR
GND1
X2
X1
VDD1
GND2
ACLK
PCLK
27M_2
PS
OE
3.68M
VDD2
AS1
GND3
27M
AS0
C0112 0.1u B
C0114 0.1u B
JS0100 XX
JS0101 0
IC0105 ICS9112AM-16-ER
R0114 33
REF
CLK2
CLK1
GND
CLKOUT
CLK4
VDD
CLK3
R0121 33
CLK_PCI_USB (to 15)
C0117 0.1u B
R0122 33
CLK_PCI_7020 (to 7)
R0123 33
JL0100
CLK_PCI_S0 (to 18)
R0124 33
CLK_PCI_VTCH (to 5)
R0125 33
CLK_PCI_MS
(to 9,10)
R0111 XX
CL0101
CL0102
V3V
GND
FL0100
C0101 47u 4V
C0103 0.1u B
IC0106 ICS502MT
R0112 33
C0116 0.1u B
X1
VDD
GND
REF
X2
S1
S0
CLK
2X
R0126 33
JL0105
CLK_IDE_66M
SW_RST_N (to 7)
R0102 0
R0140 100
IC0101 MAX708TCSA-TG068
MR_N (to 18)
C0118 XX B
MR
VCC
GND
PFI
RESET
RESETN
N.C
PFO
DIP
R0104 0
RST_B7020_N (to 7)
R0103 5100
C0107 0.1u B
R0143 XX
Q0101 XX
JL0106
R0144 XX
V5V
C0108 0.1u B
C0109 XX B
IC0102 SN74AHC1G32DBVR
CPU_CLDRST_N (to 6,7)
R0105 0
C0119 XX B
RST_MSP_N (to 4)
R0141 0
RST_AIN_N (to 3)
R0139 0
RST_MODEM_N (to 13)
REF 0100 - 0199
DRAWING (TYPE D42)
SONY STANDARD :90.10
A3
YYYY/MM/DD HH:MM @plot
@plot
UNIT mm
ANGLE
SCALE :
TOLERANCE
USED ON
RANK
FAMILY
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) SYSTEM CLOCK/RESET
PART NO.
SHEET
2
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED

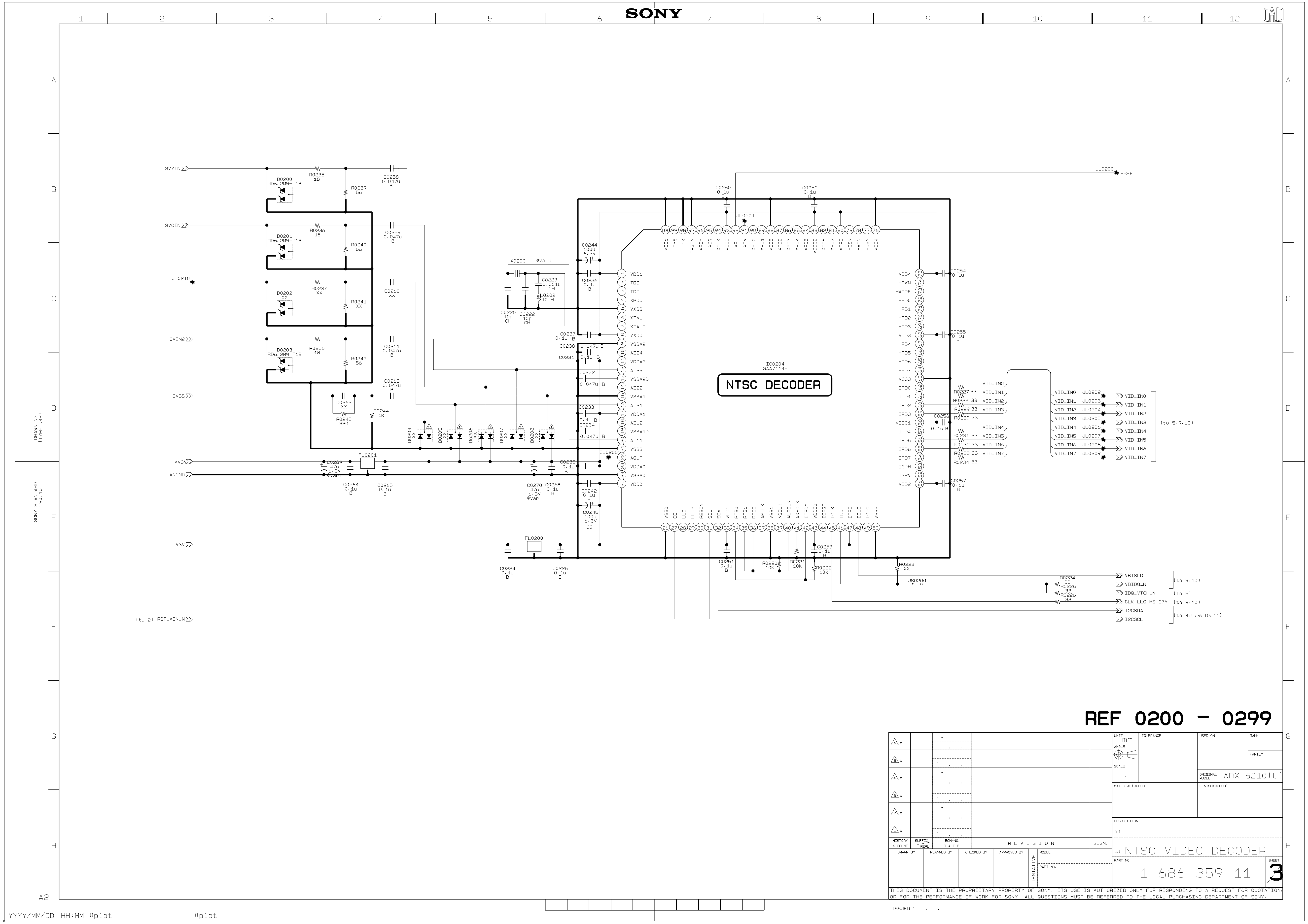
NOTE:
If M A PWB is
1-686-359-12
use this page 2.

SYSTEM CLOCK & RESET FOR MA PWB 1-686-359-13

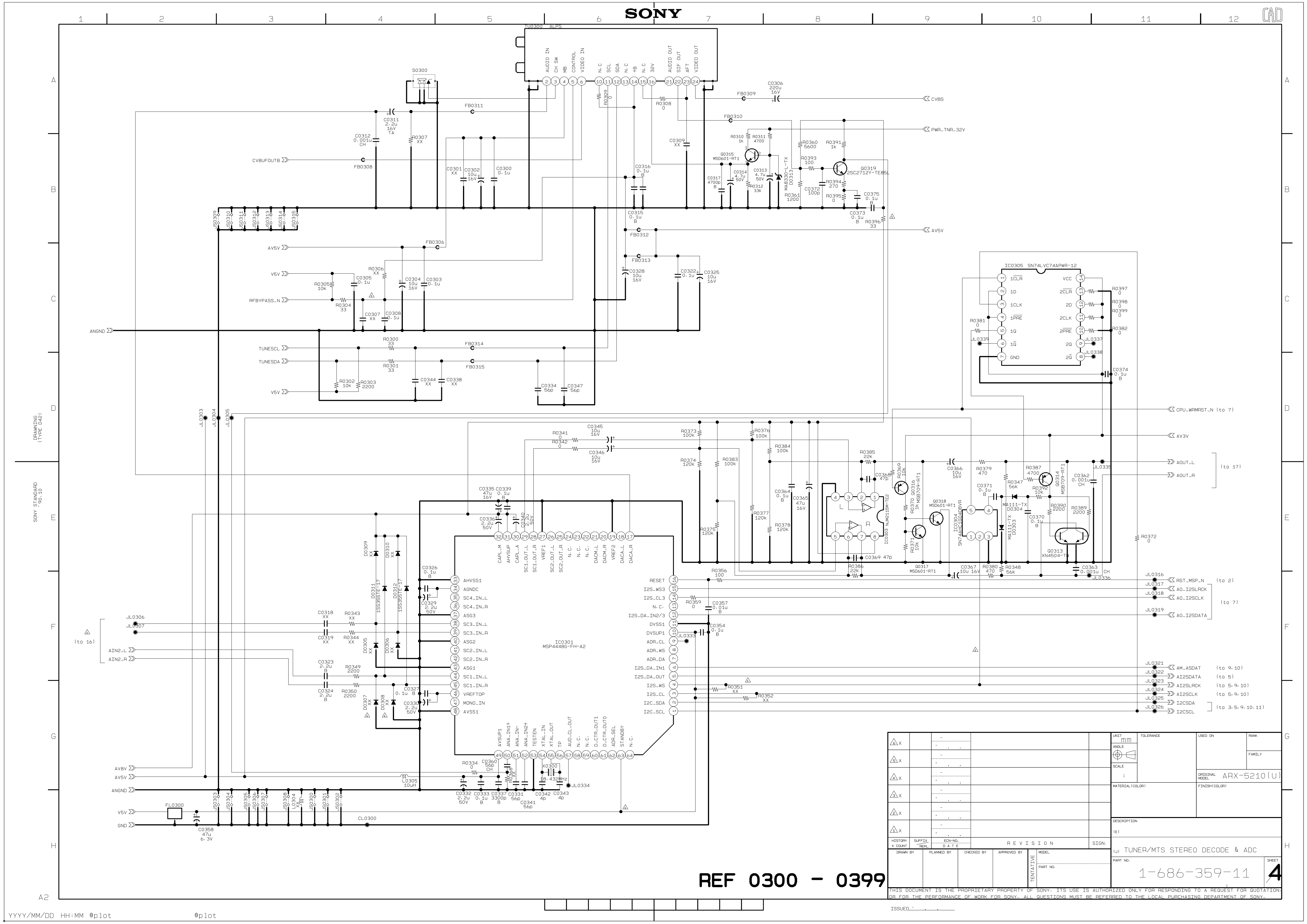


NOTE:
If M A PWB is
1-686-359-13
use this page 2.

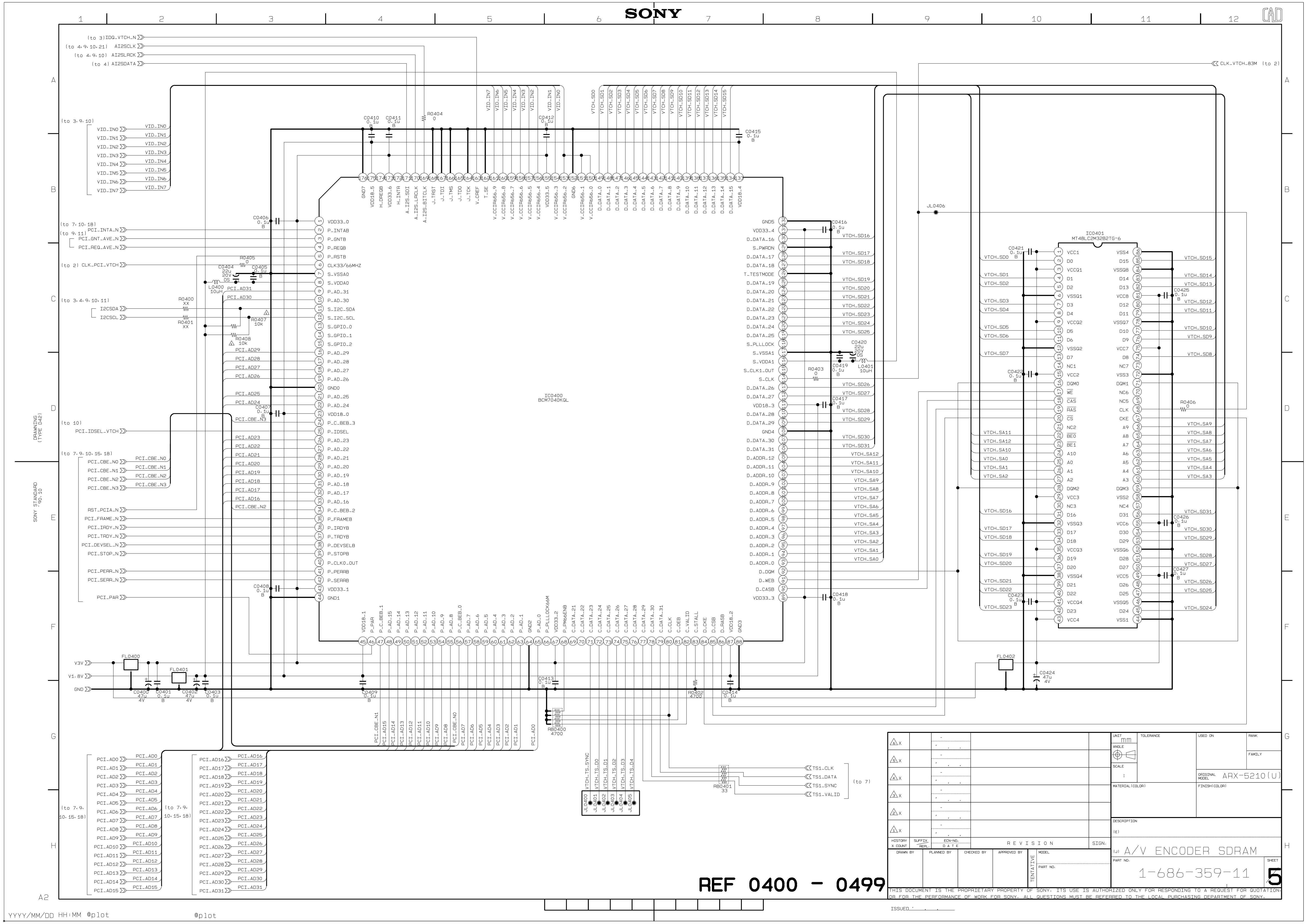
SONY
CAD
1 2 3 4 5 6 7 8
A B C D E F
JL0101 CLK_MS_27M
JL0102 CLK256FS (to 9, 10)
R0115 33
R0116 33
JL0103 CLK_SEC_3_68M (to 12)
R0117 33 CLK_IR_3_68M (to 18)
R0118 33 JL0104 CLK_B7020_27M (to 7)
R0119 33
IC0104 ICS502MT X1 VDD GND REF X2 S1 S0 CLK 2.5X
R0113 33
C0115 0.1u B
R0120 33 CLK_VTCH_83M (to 5)
X0101 27MHz
C0111 4p
C0113 4p
R0142 0
IC0103 MK2745-26STR
GND1 X2 X1 VDD1 GND2 ACLK PCLK 27M_2 PS OE 3.68M VDD2 AS1 GND3 27M AS0
C0112 0.1u B
C0114 0.1u B
JS0100 XX
JS0101 0
IC0105 ICS9112AM-16-ER REF CLK2 CLK1 GND CLKOUT CLK4 VDD CLK3
R0114 33
C0117 0.1u B
R0121 33 CLK_PCI_USB (to 15)
R0122 33 CLK_PCI_7020 (to 7)
R0123 33 JL0100 CLK_PCI_S0 (to 18)
R0124 33 CLK_PCI_VTCH (to 5)
R0125 33 CLK_PCI_MS (to 9, 10)
C0101 47u 4V
C0103 0.1u B
FL0100
V3V
GND
CL0101
CL0102
R0111 XX
SW_RST_N (to 7)
R0102 0
R0140 100
IC0101 MAX708TCSA-TG068 MR VCC GND PFI RESET RESETN N.C PFO DIP
R0146 470
MR_N (to 18)
C0118 XX B
R0103 5100
C0107 0.1u B
R0143 XX
Q0101 XX
JL0106
R0144 XX
IC0106 ICS502MT X1 VDD GND REF X2 S1 S0 CLK 2X
R0112 33
C0116 0.1u B
R0126 33 JL0105 CLK_IDE_66M
IC0107 TC74VHC123AFT(EL) 2A 2B 2CLR 2Q 1Q 1Cx 1Rx/Cx Vcc GND 2Rx/Cx 2Cx 2Q 1Q 1CLR 1B 1A
R0147 100k
C0141 10u 16V
D0140 MA111-TX
R0148 2200
RST_B7020_N (to 7)
D0139 MA111-TX
C0139 22u 6.3V
R0145 150k
Q0139 MSD601-RT1
C0140 47u 6.3V
V5V
C0108 0.1u B
C0109 XX B
IC0102 SN74AHC1G32DBVR
CPU_CLDRST_N (to 6, 7)
R0105 0
C0119 XX B
RST_MSP_N (to 4)
R0141 0 RST_AIN_N (to 3)
R0139 0 RST_MODEM_N (to 13)
DRAWING (TYPE D42)
SONY STANDARD '90.10
A3
YYYY/MM/DD HH:MM @plot
REF 0100 - 0199
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. D A T E
R E V I S I O N
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
UNIT mm
ANGLE
SCALE
TOLERANCE
USED ON
RANK
FAMILY
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) SYSTEM CLOCK/RESET
PART NO.
SHEET 2
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED

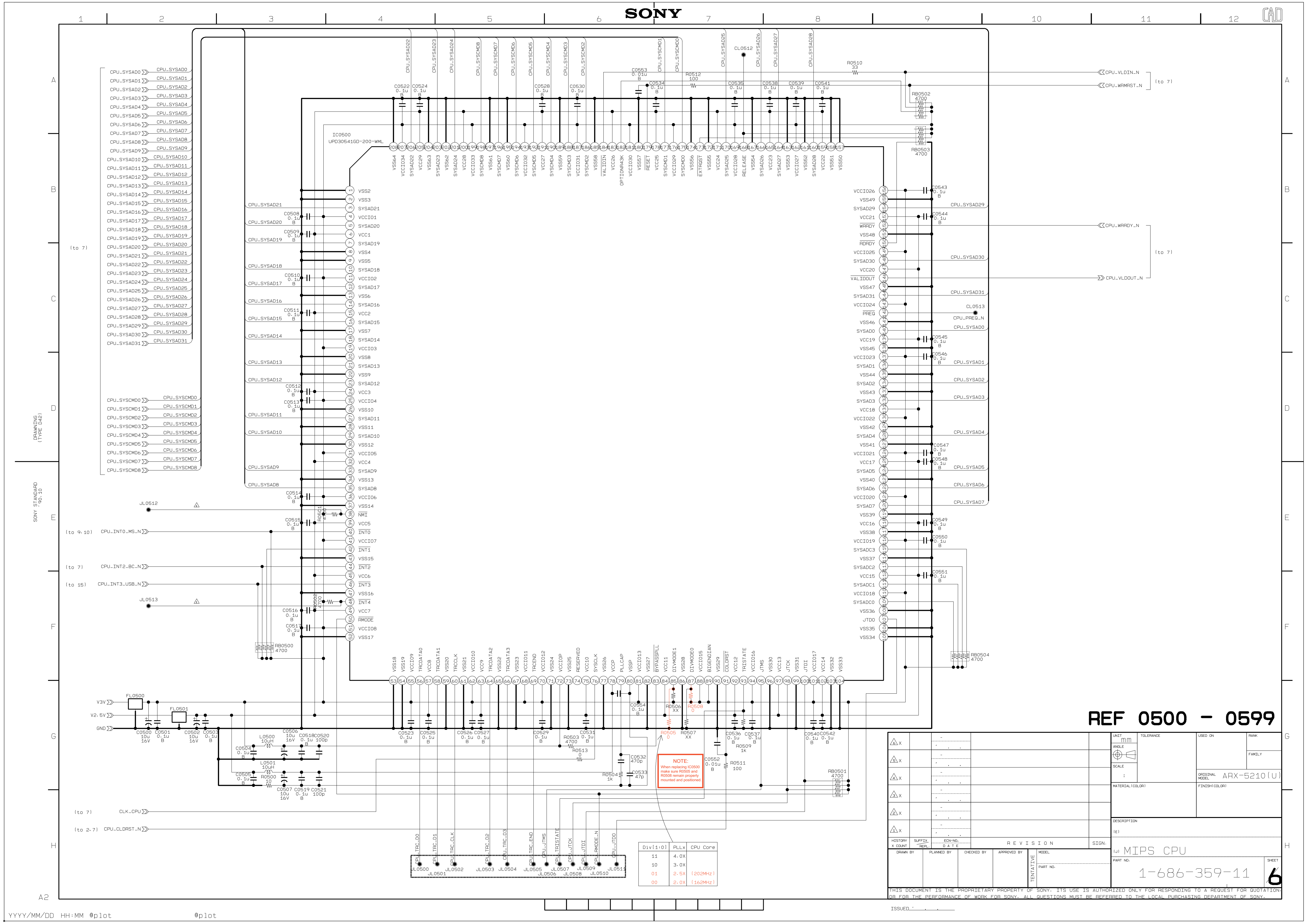

SONY
NTSC DECODER
IC0204
SAA7114H
SVYIN
SVCIN
JL0210
CVIN2
CVBS
AV3V
ANGND
V3V
(to 2) RST_AIN_N
D0200 RD6.2MW-T1B
D0201 RD6.2MW-T1B
D0202 XX
D0203 RD6.2MW-T1B
R0235 18
R0236 18
R0237 XX
R0238 18
R0239 56
R0240 56
R0241 XX
R0242 56
R0243 330
R0244 1k
C0258 0.047u B
C0259 0.047u B
C0260 XX
C0261 0.047u B
C0263 0.047u B
C0262 XX
X0200
L0202 10uH
C0223 0.001u CH
C0220 10p CH
C0222 10p CH
C0244 100u 6.3V
C0236 0.1u B
C0237 0.1u B
C0238 0.047u B
C0231 0.1u B
C0232 0.047u B
C0233 0.1u B
C0234 0.047u B
C0235 0.1u B
C0242 0.1u B
C0245 100u 6.3V OS
C0269 47u 6.3V
C0264 0.1u B
C0265 0.1u B
C0270 47u 6.3V
C0268 0.1u B
FL0201
FL0200
C0224 0.1u B
C0225 0.1u B
CL0200
C0250 0.1u B
C0252 0.1u B
JL0201
JL0200 HREF
C0254 0.1u B
C0255 0.1u B
C0256 0.1u B
C0257 0.1u B
R0227 33
R0228 33
R0229 33
R0230 33
R0231 33
R0232 33
R0233 33
R0234 33
VID_IN0
VID_IN1
VID_IN2
VID_IN3
VID_IN4
VID_IN5
VID_IN6
VID_IN7
JL0202
JL0203
JL0204
JL0205
JL0206
JL0207
JL0208
JL0209
(to 6,9,10)
C0251 0.1u B
C0253 0.1u B
R0220 10k
R0221 10k
R0222 10k
R0223 XX
JS0200
R0224 33
R0225 33
R0226 33
VBISLD
VBIDQ_N
IDQ_VTCH_N
CLK_LLC_MS_27M
I2CSDA
I2CSCL
(to 9,10)
(to 5)
(to 9,10)
(to 4,5,9,10,11)
REF 0200 - 0299
ARX-5210(U)
NTSC VIDEO DECODER
1-686-359-11
3
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
YYYY/MM/DD HH:MM @plot
@plot

TUNER/MTS STEREO DECODE & ADC


SONY
TU0300 ALPS
AUDIO IN
CH SW
MB
CONTROL
VIDEO IN
N.C
SCL
SDA
N.C
+B
N.C
32V
AUDIO OUT
SIF OUT
AFT
VIDEO OUT
S0300
FB0311
FB0309
C0306 220u 16V
CVBS
FB0310
PWR_TNR_32V
C0311 2.2u 16V TA
C0312 0.001u CH
R0307 XX
CVBUFOUTB
FB0308
C0301 XX
C0302 10u 16V
C0300 0.1u
R0309 0
R0308 0
C0309 XX
C0316 0.1u B
R0310 1k
R0311 4700
Q0315 MSD601-RT1
C0317 4700p B
C0314 4.7u 50V
C0313 4.7u 50V
R0312 33k
MA8330-L-TX D0313
R0361 1200
R0360 5600
R0393 100
R0391 1k
Q0319 2SC2712Y-TE85L
C0372 100p
R0394 270
R0395 0
C0375 0.1u B
C0373 0.1u B
R0396 33
C0315 0.1u B
FB0312
AV5V
FB0306
FB0313
C0328 10u 16V
C0322 0.1u
C0325 10u 16V
V5V
R0306 XX
C0305 0.1u
R0305 10k
C0304 10u 16V
C0303 0.1u
RFBYPASS_N
R0304 33
C0307 XX
C0308 0.1u
ANGND
R0300 33
FB0314
TUNESCL
TUNESDA
R0301 33
FB0315
R0302 10k
R0303 2200
C0344 XX
C0338 XX
C0334 56p
C0347 56p
IC0305 SN74LVC74APWR-12
1CLR
1D
1CLK
1PRE
1Q
1Q
GND
VCC
2CLR
2D
2CLK
2PRE
2Q
2Q
R0397 0
R0398 0
R0399 0
R0381 0
R0382 0
JL0339
JL0337
JL0338
C0374 0.1u B
CPU_WARMRST_N (to 7)
AV3V
AOUT_L
AOUT_R
(to 17)
JL0303
JL0304
JL0305
R0341 0
R0342 0
C0345 10u 16V
C0346 10u 16V
R0373 100k
R0376 100k
R0374 120k
R0383 100k
R0384 100k
R0385 22k
C0368 47p
R0369 10k
Q0316 MSB709-RT1
C0366 10u 16V
R0379 470
R0387 4700
Q0314 MSB709-RT1
C0362 0.001u CH
JL0335
C0364 0.1u B
C0365 47u 16V
IC0303 NJM2115M-TE2
C0371 0.1u B
R0347 56k
R0392 10k
R0370 1k
Q0318 MSD601-RT1
MA111-TX D0304
D0303
R0390 2200
R0389 2200
C0370 0.1u B
R0377 120k
R0378 120k
R0375 120k
R0371 10k
IC0304 SN74AHC1G04DBVR
Q0313 XN4504-TX
R0372 0
C0369 47p
R0386 22k
Q0317 MSD601-RT1
C0367 10u 16V
R0380 470
R0348 56k
C0363 0.001u CH
JL0336
C0335 47u 16V
C0339 0.1u B
C0336 2.2u 50V
C0340 2.2u 50V
CAPL_M
AHVSUP
CAPL_A
SC1_OUT_L
SC1_OUT_R
VREF1
SC2_OUT_L
SC2_OUT_R
N.C.
DACM_L
DACM_R
VREF2
DACA_L
DACA_R
D0309 XX
D0310 XX
C0326 0.1u B
AHVSS1
AGNDC
SC4_IN_L
SC4_IN_R
ASG3
SC3_IN_L
SC3_IN_R
ASG2
SC2_IN_L
SC2_IN_R
ASG1
SC1_IN_L
SC1_IN_R
VREFTOP
MONO_IN
AVSS1
D0311 1SS355TE-17
D0312 1SS355TE-17
C0329 2.2u 50V
IC0301 MSP4448G-FH-A2
RESET
I2S_WS3
I2S_CL3
N.C.
I2S_DA_IN2/3
DVSS1
DVSUP1
ADR_CL
ADR_WS
ADR_DA
I2S_DA_IN1
I2S_DA_OUT
I2S_WS
I2S_CL
I2C_SDA
I2C_SCL
R0356 100
R0359 0
C0357 0.01u B
C0354 0.1u B
JL0333
R0351 XX
R0352 XX
JL0316
JL0317
JL0318
JL0319
RST_MSP_N (to 2)
AO_I2SLRCK
AO_I2SCLK (to 7)
AO_I2SDATA
JL0321
JL0322
JL0323
JL0324
JL0325
JL0326
AM_ASDAT (to 9,10)
AI2SDATA (to 5)
AI2SLRCK (to 5,9,10)
AI2SCLK (to 5,9,10)
I2CSDA
I2CSCL (to 3,5,9,10,11)
JL0306
JL0307
(to 16)
AIN2_L
AIN2_R
C0318 XX
R0343 XX
C0319 XX
R0344 XX
D0305 XX
D0306 XX
C0323 2.2u B
R0349 2200
C0324 2.2u B
R0350 2200
D0307 XX
D0308 XX
C0327 0.1u B
C0330 2.2u 50V
AVSUP1
ANA_IN1+
ANA_IN-
ANA_IN2+
TESTEN
XTAL_IN
XTAL_OUT
TP
AUD_CL_OUT
N.C.
D_CTR_OUT1
D_CTR_OUT0
ADR_SEL
STANDBY
N.C.
R0334 0
C0360 56p CH
X0300 18.432MHz
JL0334
L0305 10uH
C0332 2.2u 50V
C0333 0.1u B
C0337 3300p B
C0331 56p
C0341 56p
C0342 4p
C0343 4p
AV8V
AV5V
ANGND
V5V
GND
FL0300
C0358 47u 6.3V
CL0300
JS0300
JS0301
JS0302
JS0303
JS0304
JS0305
JS0306
JS0307
JS0308
JS0309
JS0310
JS0311
JS0312
JS0313
JS0314
JS0315
L0304
DRAWING (TYPE D42)
SONY STANDARD 42-10
A2
YYYY/MM/DD HH:MM @plot
@plot
UNIT mm
TOLERANCE
USED ON
RANK
ANGLE
FAMILY
SCALE
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) TUNER/MTS STEREO DECODE & ADC
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
MODEL
TENTATIVE
PART NO.
PART NO. 1-686-359-11
SHEET 4
REF 0300 - 0399
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED

A/V ENCODER SDRAM


SONY
IC0400
BCM7040KQL
IC0401
MT48LC2M32B2TG-6
FL0400
FL0401
FL0402
L0400 10uH
L0401 10uH
RB0400 4700
RB0401 33
JL0406
V3V
V1.8V
GND
CLK_VTCH_B3M (to 2)
TS1_CLK
TS1_DATA
TS1_SYNC
TS1_VALID
(to 7)
REF 0400 - 0499
UNIT mm
ANGLE
SCALE
TOLERANCE
USED ON
RANK
FAMILY
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) A/V ENCODER SDRAM
PART NO.
1-686-359-11
SHEET
5
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED
DRAWING (TYPE D42)
SONY STANDARD NO.10
A2
YYYY/MM/DD HH:MM @plot
@plot


SONY
IC0500
UPD30541GD-200-WML
CPU_SYSAD0 … CPU_SYSAD31
CPU_SYSCMD0 … CPU_SYSCMD8
(to 7)
CPU_VLDIN_N
CPU_WRMRST_N
CPU_WRRDY_N
CPU_VLDOUT_N
CPU_PREQ_N
CL0513
CL0514
R0510 33
R0512 100
RB0502 4700
RB0503 4700
RB0500 4700
RB0504 4700
RB0501 4700
(to 9,10) CPU_INT0_MS_N
(to 7) CPU_INT2_BC_N
(to 15) CPU_INT3_USB_N
JL0512
JL0513
V3V
V2.5V
GND
FL0500
FL0501
L0500 10uH
L0501 10uH
(to 7) CLK_CPU
(to 2,7) CPU_COLDRST_N
JL0500 JL0501 JL0502 JL0503 JL0504 JL0505 JL0506 JL0507 JL0508 JL0509 JL0510 JL0511
CPU_TRC_D0
CPU_TRC_D1
CPU_TRC_CLK
CPU_TRC_D2
CPU_TRC_D3
CPU_TRC_END
CPU_JTMS
CPU_JTRISTATE
CPU_JTCK
CPU_JTDI
CPU_RMODE_N
CPU_JTDO
C0554 0.1u B
R0506 XX
R0508 0
R0505 0
R0507 XX
C0536 0.1u B
C0537 0.1u B
R0509 1k
C0532 470p
C0533 47p
R0504 1k
C0552 0.01u B
R0511 100
R0503 4700
R0513 0
DRAWING (TYPE 242)
SONY STANDARD
A2
YYYY/MM/DD HH:MM @plot
@plot
REF 0500 - 0599

NOTE:
When replacing IC0500 make sure R0505 and R0508 remain properly mounted and positioned.

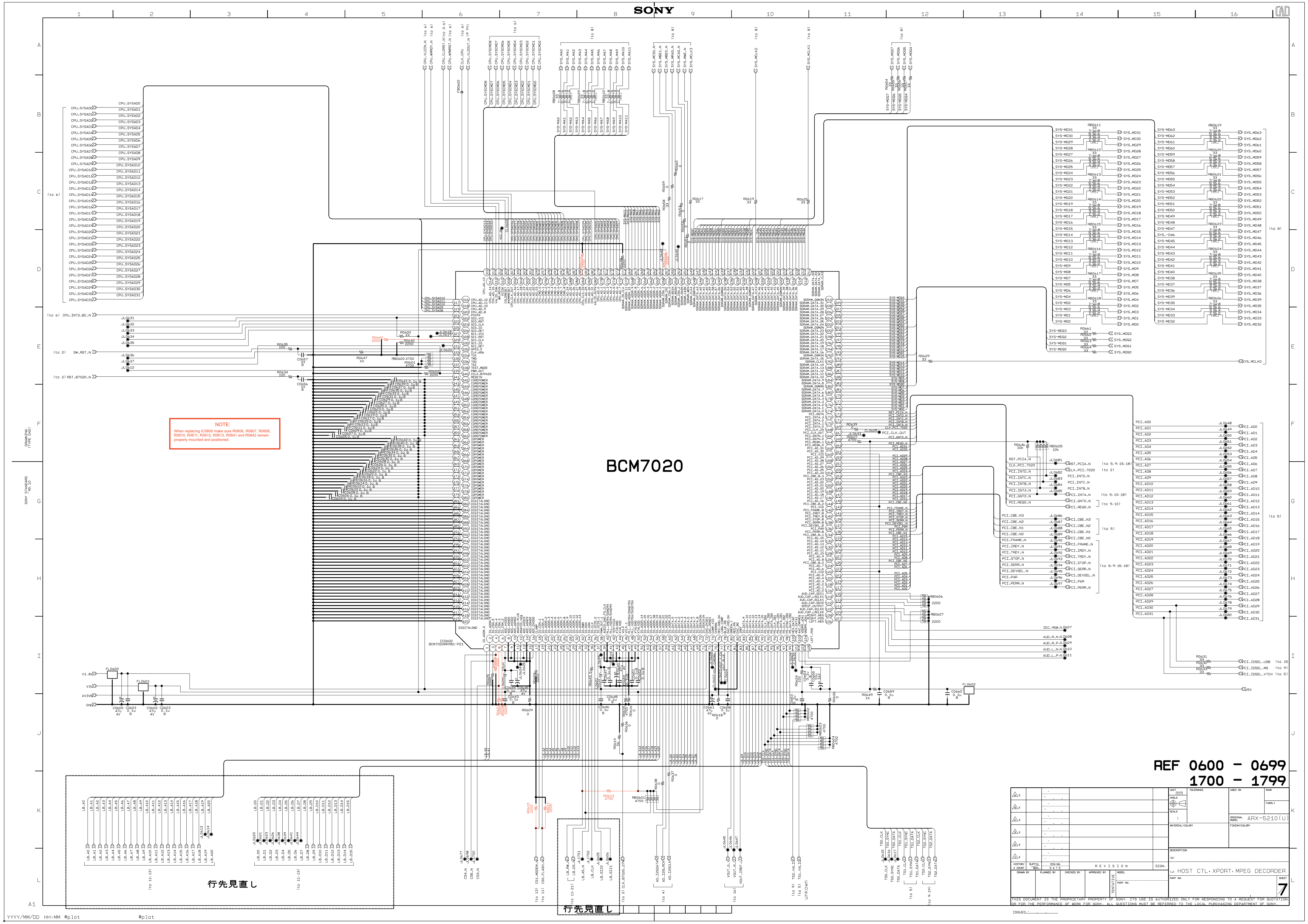
Div[1:0]	PLLx	CPU Core
11	4.0X	
10	3.0X	
01	2.5X	(202MHz)
00	2.0X	(162MHz)

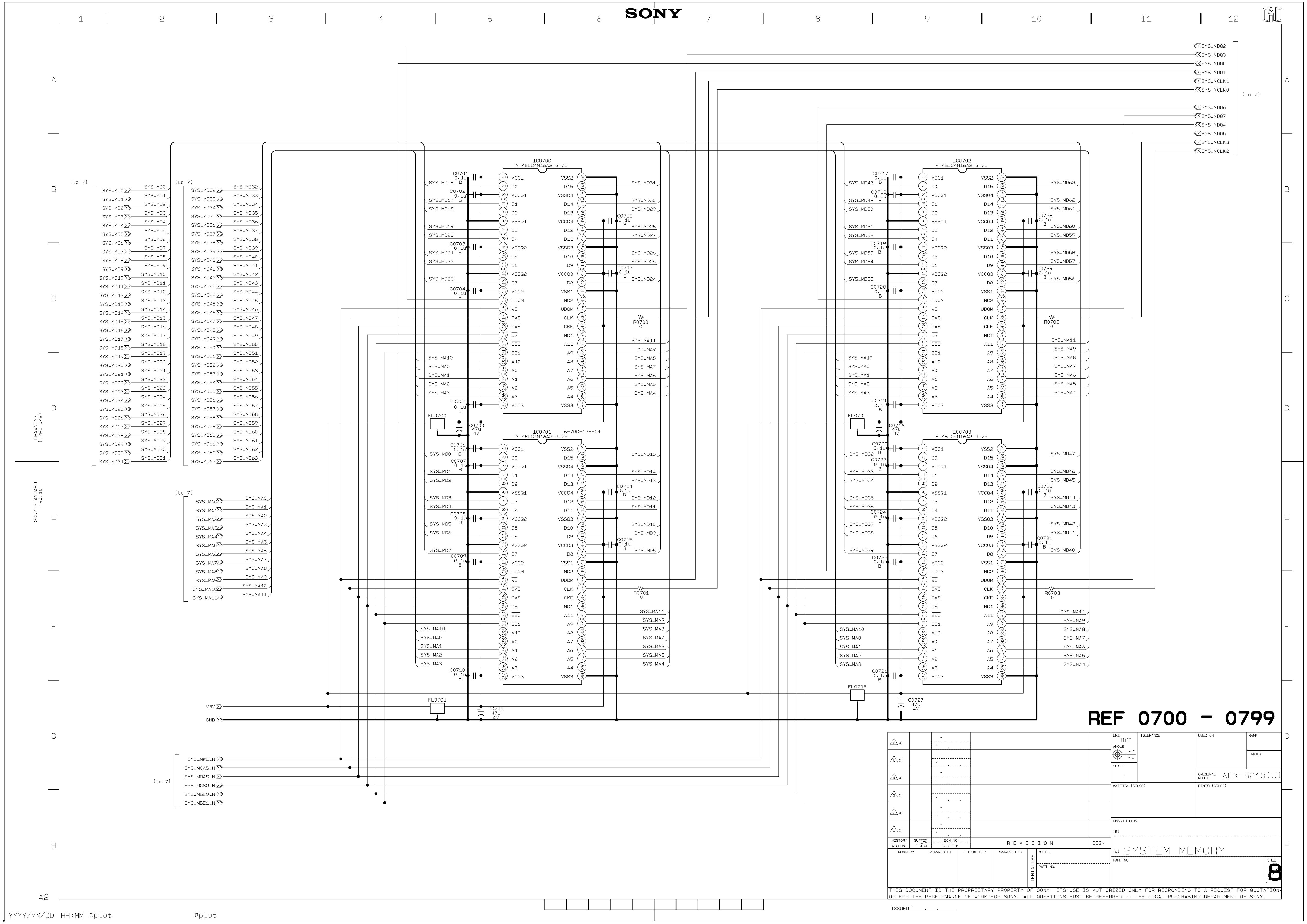
UNIT mm
TOLERANCE
USED ON
RANK
FAMILY
ANGLE
SCALE :
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) MIPS CPU
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
PART NO. 1-686-359-11
SHEET 6

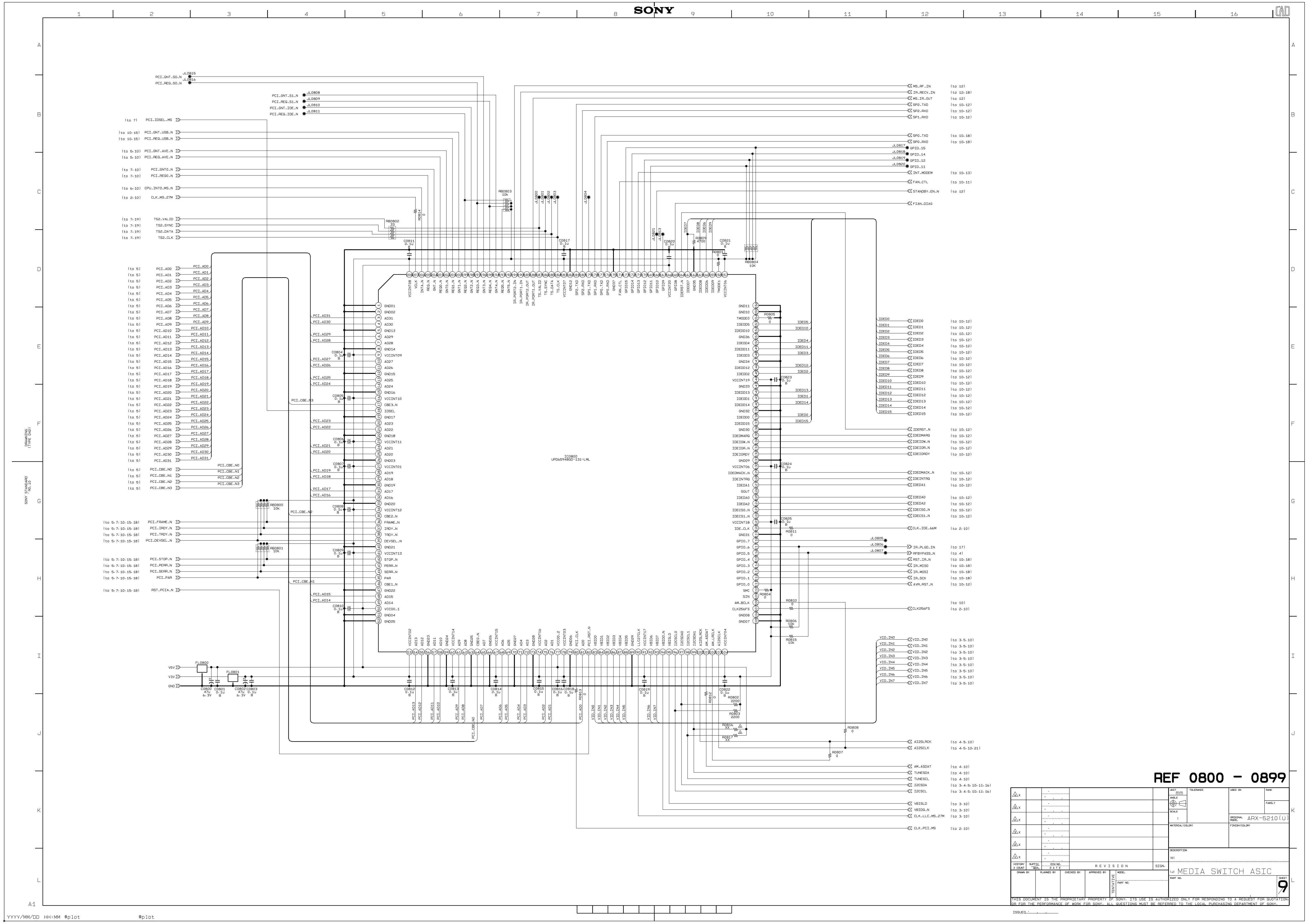
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.

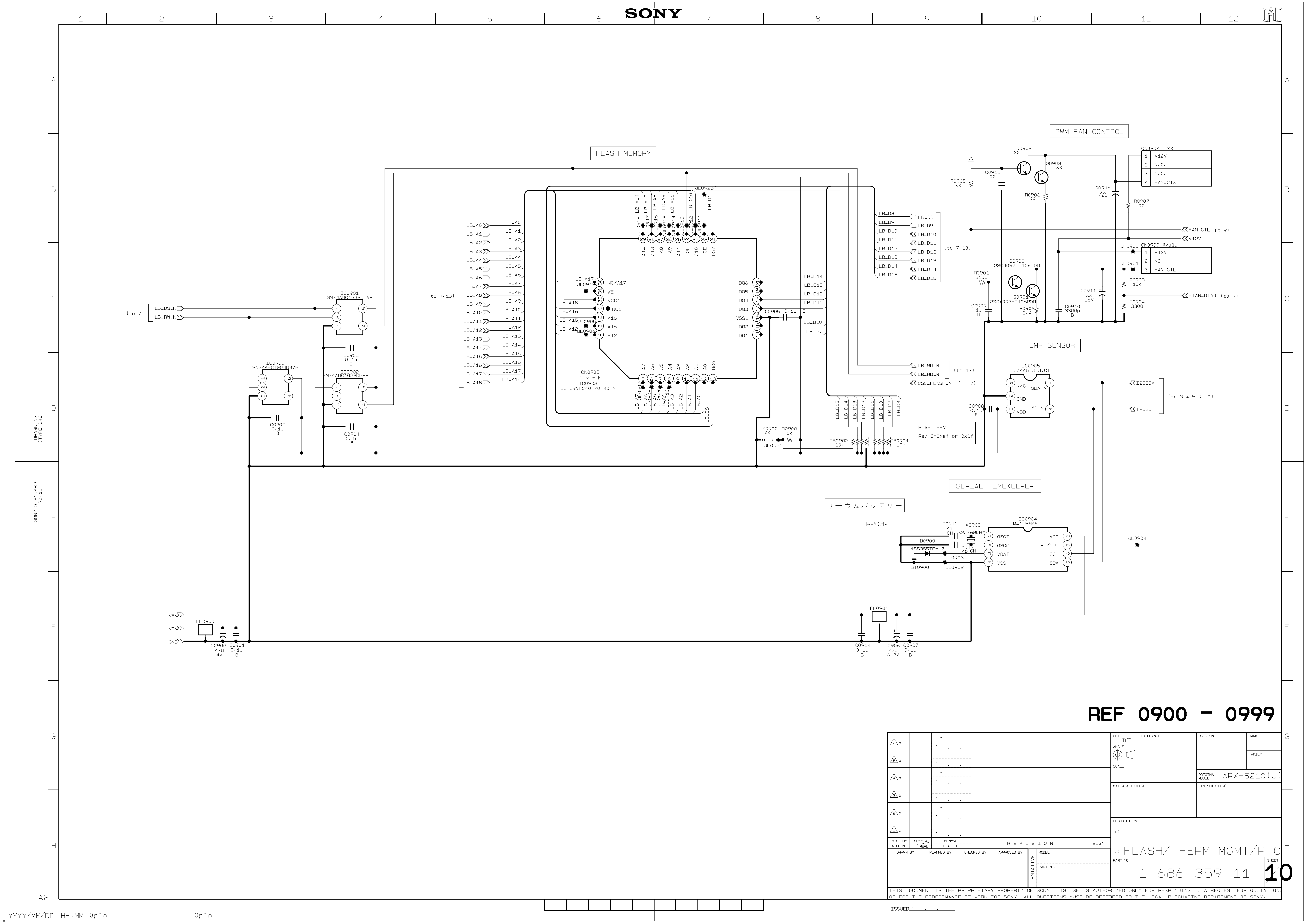
ISSUED ' . .

HOST CTL, XPORT, MPEG DECODER

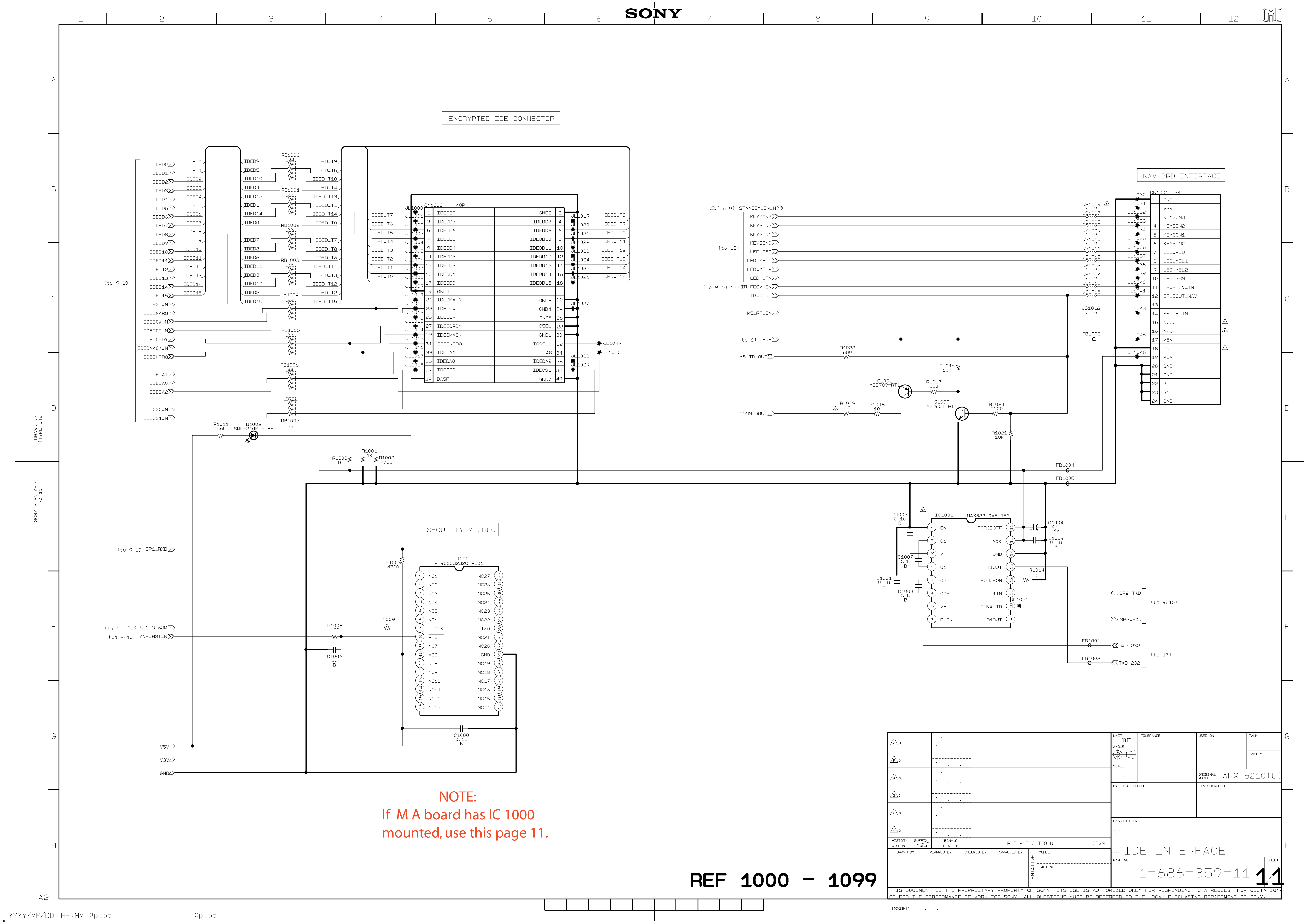

SONY
BCM7020
IC0600
BCM7020KPB1-P21
NOTE:
When replacing IC0600 make sure R0606, R0607, R0608, R0610, R0611, R0612, R0613, R0641 and R0642 remain properly mounted and positioned.
行先見直し
行先見直し
REF 0600 – 0699
1700 – 1799
UNIT mm
ORIGINAL MODEL ARX-5210(U)
DESCRIPTION
(J) HOST CTL, XPORT, MPEG DECORDER
SHEET 7
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED
YYYY/MM/DD HH:MM @plot


SONY
IC0700
MT48LC4M16A2TG-75
IC0701
MT48LC4M16A2TG-75
6-700-175-01
IC0702
MT48LC4M16A2TG-75
IC0703
MT48LC4M16A2TG-75
FL0700
FL0701
FL0702
FL0703
R0700
R0701
R0702
R0703
(to 7)
SYS_MD0 – SYS_MD63
SYS_MA0 – SYS_MA11
SYS_MDQ0 – SYS_MDQ7
SYS_MCLK0 – SYS_MCLK3
SYS_MWE_N
SYS_MCAS_N
SYS_MRAS_N
SYS_MCS0_N
SYS_MBE0_N
SYS_MBE1_N
V3V
GND
REF 0700 - 0799
ARX-5210(U)
SYSTEM MEMORY
8
REVISION
TENTATIVE
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
A2
YYYY/MM/DD HH:MM @plot
@plot


SONY
IC0800
UPD65948GD-131-LML
PCI_GNT_S0_N
PCI_REQ_S0_N
PCI_GNT_S1_N
PCI_REQ_S1_N
PCI_GNT_IDE_N
PCI_REQ_IDE_N
PCI_IDSEL_MS
PCI_GNT_USB_N
PCI_REQ_USB_N
PCI_GNT_AVE_N
PCI_REQ_AVE_N
PCI_GNT0_N
PCI_REQ0_N
CPU_INT0_MS_N
CLK_MS_27M
TS2_VALID
TS2_SYNC
TS2_DATA
TS2_CLK
PCI_AD0 – PCI_AD31
PCI_CBE_N0
PCI_CBE_N1
PCI_CBE_N2
PCI_CBE_N3
PCI_FRAME_N
PCI_IRDY_N
PCI_TRDY_N
PCI_DEVSEL_N
PCI_STOP_N
PCI_PERR_N
PCI_SERR_N
PCI_PAR
RST_PCIA_N
V5V
V3V
GND
FL0800
FL0801
MS_RF_IN
IR_RECV_IN
MS_IR_OUT
SP0_TXD
SP0_RXD
SP1_RXD
SP2_TXD
SP2_RXD
GPIO_15
GPIO_14
GPIO_12
GPIO_11
INT_MODEM
FAN_CTL
STANDBY_EN_N
FIAN_DIAG
IDED0 – IDED15
IDERST_N
IDEDMARQ
IDEIOW_N
IDEIOR_N
IDEIORDY
IDEDMACK_N
IDEINTRQ
IDEDA1
IDEDA0
IDEDA2
IDECS0_N
IDECS1_N
CLK_IDE_66M
IR_PLGD_IN
RFBYPASS_N
RST_IR_N
IR_MISO
IR_MOSI
IR_SCK
AVR_RST_N
CLK256FS
VID_IN0 – VID_IN7
AI2SLRCK
AI2SCLK
AM_ASDAT
TUNESDA
TUNESCL
I2CSDA
I2CSCL
VBISLD
VBIDQ_N
CLK_LLC_MS_27M
CLK_PCI_MS
REF 0800 - 0899
UNIT mm
TOLERANCE
USED ON
RANK
ANGLE
FAMILY
SCALE
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) MEDIA SWITCH ASIC
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
SHEET
9
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED
A1
YYYY/MM/DD HH:MM @plot
@plot


SONY
FLASH_MEMORY
CN0903
ソケット
IC0903
SST39VF040-70-4C-NH
NC/A17
WE
VCC1
NC1
A16
A15
a12
A14
A13
A8
A9
A11
OE
A10
CE
DQ7
DQ6
DQ5
DQ4
DQ3
VSS1
DO2
DO1
DO0
A7
A6
A5
A4
A3
A2
A1
A0
C0905 0.1u B
JL0905
JL0906
JL0907
JL0908
JL0909
JL0910
JL0911
JL0912
JL0913
JL0914
JL0915
JL0916
JL0917
JL0918
JL0919
JL0920
JL0921
LB_A0 … LB_A18
(to 7, 13)
LB_D8 … LB_D15
(to 7, 13)
LB_WR_N
LB_RD_N
(to 13)
CS0_FLASH_N
(to 7)
LB_DS_N
LB_RW_N
(to 7)
IC0900
SN74AHC1G04DBVR
IC0901
SN74AHC1G32DBVR
IC0902
SN74AHC1G32DBVR
C0902 0.1u B
C0903 0.1u B
C0904 0.1u B
JS0900 XX
R0900 1k
RB0900 10k
RB0901 10k
BOARD REV
Rev G=0xef or 0x6f
PWM FAN CONTROL
Q0902 XX
Q0903 XX
R0905 XX
C0915 XX
R0906 XX
C0916 XX 16V
R0907 XX
CN0904 XX
1 V12V
2 N.C.
3 N.C.
4 FAN_CTX
FAN_CTL (to 9)
V12V
JL0900
JL0901
CN0900 @valu
1 V12V
2 NC
3 FAN_CTL
Q0900 2SC4097-T106PQR
Q0901 2SC4097-T106PQR
R0901 5100
R0902 2.4
C0909 1u B
C0910 3300p B
C0911 XX 16V
R0903 10k
R0904 3300
FIAN_DIAG (to 9)
TEMP SENSOR
IC0905
TC74A5-3.3VCT
N/C
GND
VDD
SDATA
SCLK
C0908 0.1u B
I2CSDA
I2CSCL
(to 3, 4, 5, 9, 10)
SERIAL_TIMEKEEPER
リチウムバッテリー
CR2032
C0912 4p CH
X0900 32.768kHz
C0913 4p CH
D0900 1SS355TE-17
BT0900
JL0902
JL0903
JL0904
IC0904
M41T56M6TR
OSCI
OSCO
VBAT
VSS
VCC
FT/OUT
SCL
SDA
V5
V3
GND
FL0900
C0900 47u 4V
C0901 0.1u B
FL0901
C0914 0.1u B
C0906 47u 6.3V
C0907 0.1u B
DRAWING (TYPE D42)
SONY STANDARD NO. 10
A2
REF 0900 - 0999
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
UNIT mm
ANGLE
SCALE
TOLERANCE
USED ON
RANK
FAMILY
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) FLASH/THERM MGMT/RTC
PART NO.
1-686-359-11
SHEET 10
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION. OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED
YYYY/MM/DD HH:MM @plot
@plot

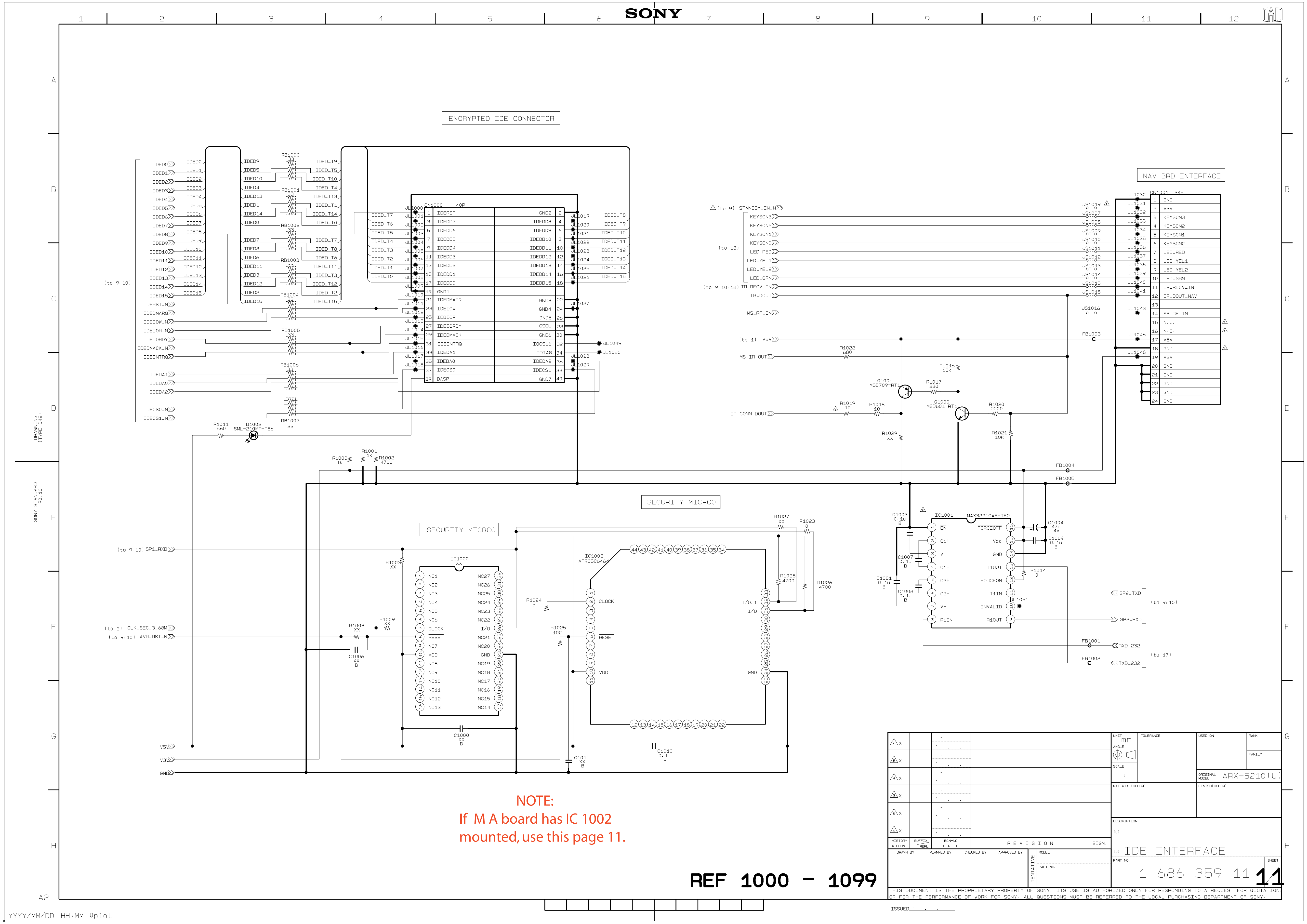
IDE INTERFACE FOR MA BOARD WITH IC 1000


SONY
ENCRYPTED IDE CONNECTOR
CN1000 40P
RB1000 33
RB1001 33
RB1002 33
RB1003 33
RB1004 33
RB1005 33
RB1006 33
RB1007 33
(to 9,10)
IDERST_N
IDEDMARQ
IDEIOW_N
IDEIOR_N
IDEIORDY
IDEDMACK_N
IDEINTRQ
IDEDA1
IDEDA0
IDEDA2
IDECS0_N
IDECS1_N
R1011 560
D1002 SML-210MT-T86
R1000 1k
R1001 1k
R1002 4700
NAV BRD INTERFACE
CN1001 24P
(to 9) STANDBY_EN_N
KEYSCN3
KEYSCN2
KEYSCN1
KEYSCN0
(to 18)
LED_RED
LED_YEL1
LED_YEL2
LED_GRN
(to 9,10,18) IR_RECV_IN
IR_DOUT
MS_RF_IN
(to 1) V5V
MS_IR_OUT
IR_CONN_DOUT
R1022 680
R1016 10k
R1017 330
R1018 10
R1019 10
R1020 2200
R1021 10k
Q1001 MSB709-RT1
Q1000 MSD601-RT1
FB1003
FB1004
FB1005
SECURITY MICRO
IC1000 AT90SC3232C-RI01
(to 9,10) SP1_RXD
(to 2) CLK_SEC_3.68M
(to 9,10) AVR_RST_N
R1003 4700
R1008 100
R1009 0
C1006 XX B
C1000 0.1u B
V5V
V3V
GND
IC1001 MAX3221CAE-TE2
C1003 0.1u B
C1004 47u 4V
C1009 0.1u B
C1007 0.1u B
C1001 0.1u B
C1008 0.1u B
R1014 0
JL1051
SP2_TXD
SP2_RXD
(to 9,10)
FB1001
FB1002
RXD_232
TXD_232
(to 17)
REF 1000 - 1099
ARX-5210(U)
IDE INTERFACE
1-686-359-11
11
CAD

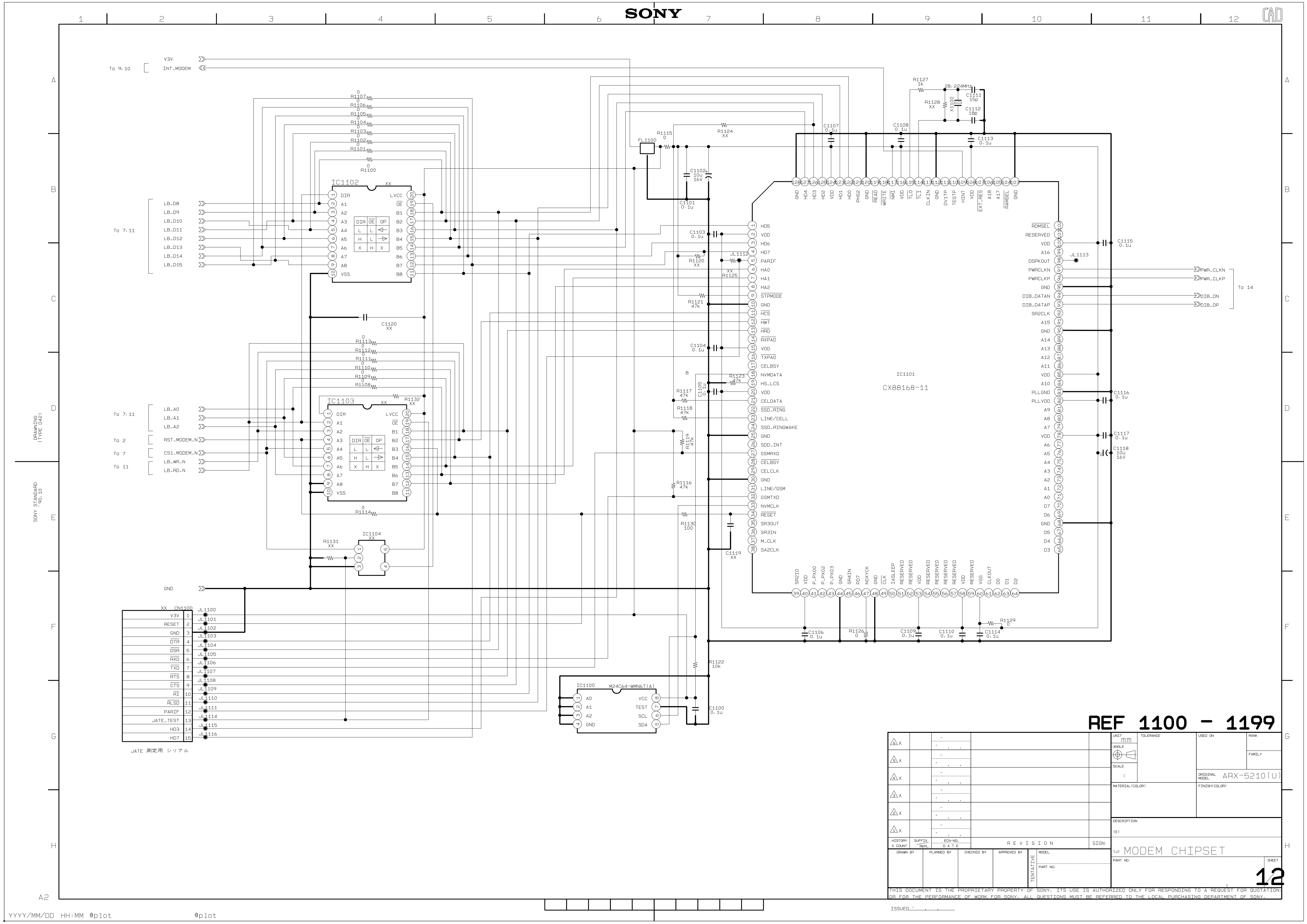
NOTE:
If M A board has IC 1000
mounted, use this page 11.

THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.

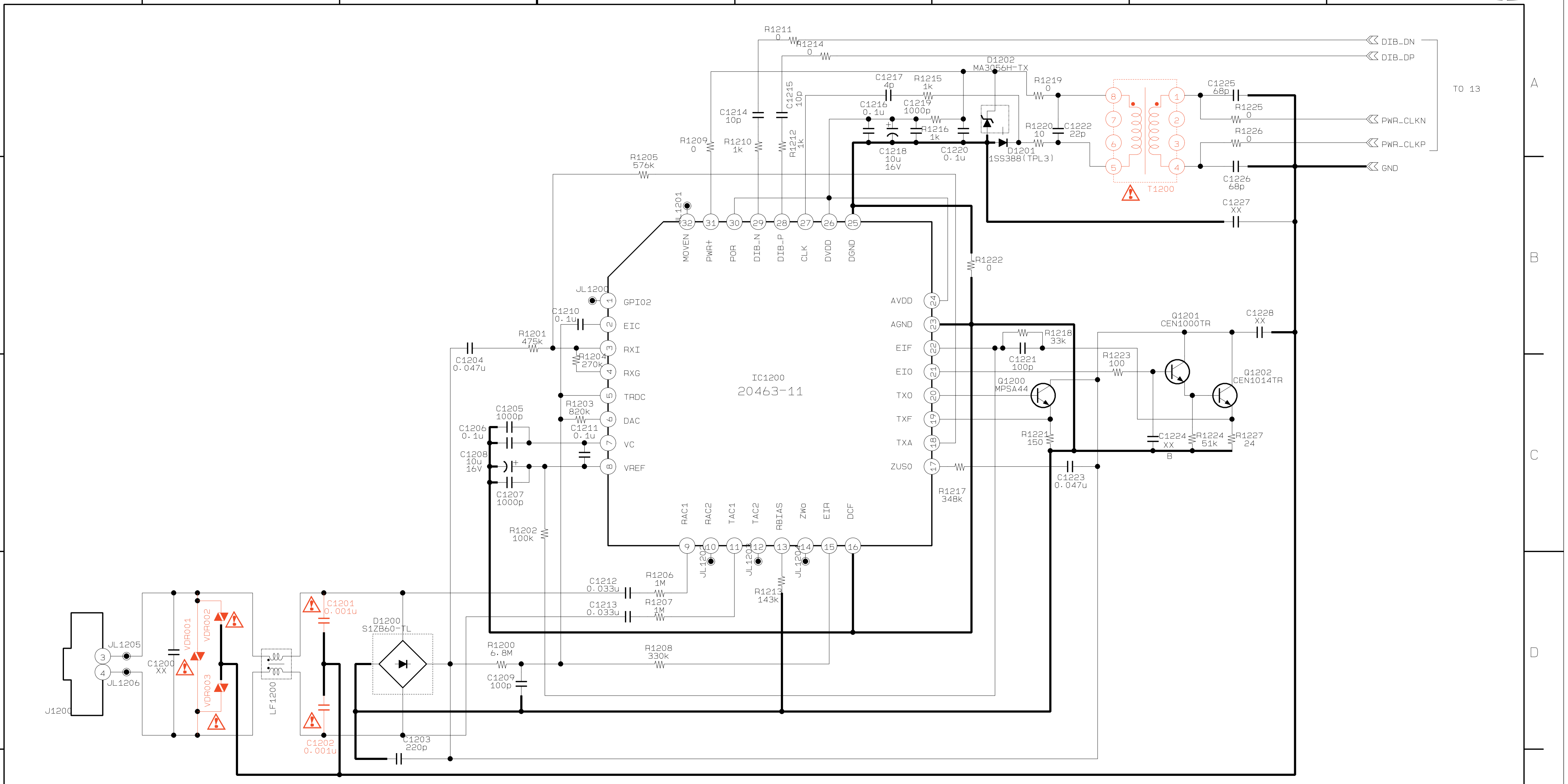
IDE INTERFACE FOR MA BOARD WITH IC 1002


SONY
ENCRYPTED IDE CONNECTOR
CN1000 40P
RB1000 33
RB1001 33
RB1002 33
RB1003 33
RB1004 33
RB1005 33
RB1006 33
RB1007 33
IDED0 – IDED15
IDED_T0 – IDED_T15
IDERST_N
IDEDMARQ
IDEIOW_N
IDEIOR_N
IDEIORDY
IDEDMACK_N
IDEINTRQ
IDEDA1
IDEDA0
IDEDA2
IDECS0_N
IDECS1_N
(to 9.10)
R1011 560
D1002 SML-210MT-T86
R1000 1k
R1001 1k
R1002 4700
JL1049
JL1050
NAV BRD INTERFACE
CN1001 24P
GND
V3V
KEYSCN3
KEYSCN2
KEYSCN1
KEYSCN0
LED_RED
LED_YEL1
LED_YEL2
LED_GRN
IR_RECV_IN
IR_DOUT_NAV
MS_RF_IN
N.C.
V5V
(to 9) STANDBY_EN_N
(to 18)
(to 9.10.18) IR_RECV_IN
IR_DOUT
MS_RF_IN
(to 1) V5V
MS_IR_OUT
IR_CONN_DOUT
FB1003
R1022 680
R1016 10k
Q1001 MSB709-RT1
R1017 330
Q1000 MSD601-RT1
R1019 10
R1018 10
R1020 2200
R1029 XX
R1021 10k
FB1004
FB1005
SECURITY MICRO
SECURITY MICRO
(to 9.10) SP1_RXD
(to 2) CLK_SEC_3.68M
(to 9.10) AVR_RST_N
R1003 XX
IC1000 XX
R1008 XX
R1009 XX
C1006 XX B
C1000 XX B
IC1002 AT90SC6464
CLOCK
RESET
VDD
GND
I/O.1
I/O
R1024 0
R1025 100
C1011 XX B
C1010 0.1u B
R1027 XX
R1023 0
R1028 4700
R1026 4700
IC1001 MAX3221CAE-TE2
EN
FORCEOFF
C1+
Vcc
V+
GND
C1-
T1OUT
C2+
FORCEON
C2-
T1IN
V-
INVALID
R1IN
R1OUT
C1003 0.1u B
C1007 0.1u B
C1001 0.1u B
C1008 0.1u B
C1004 47u 4V
C1009 0.1u B
R1014 0
JL1051
SP2_TXD
SP2_RXD
(to 9.10)
FB1001
FB1002
RXD_232
TXD_232
(to 17)
V5V
V3V
GND
ORIGINAL MODEL ARX-5210(U)
IDE INTERFACE
1-686-359-11
11
REF 1000 - 1099
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
YYYY/MM/DD HH:MM @plot
A2

NOTE:
If M A board has IC 1002
mounted, use this page 11.


SONY
V3V
INT_MODEM
To 9.10
To 7.11
LB_D8
LB_D9
LB_D10
LB_D11
LB_D12
LB_D13
LB_D14
LB_D15
IC1102
IC1103
IC1104
C1120
LB_A0
LB_A1
LB_A2
To 2
RST_MODEM_N
To 7
CS1_MODEM_N
To 11
LB_WR_N
LB_RD_N
GND
CN1100
V3V
RESET
GND
DTR
DSR
RXD
TXD
RTS
CTS
RI
RLSD
PARIF
JATE_TEST
HD3
HD7
JATE 測定用 シリアル
IC1100
M24C64-WMN6T(A)
IC1101
CX88168-11
28.224MHz
X1100
FL1100
PWR_CLKN
PWR_CLKP
DIB_DN
DIB_DP
To 14
REF 1100 - 1199
ARX-5210(U)
MODEM CHIPSET
12
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
YYYY/MM/DD HH:MM @plot
@plot

SONY


DIB_DN
DIB_DP
TO 13
PWR_CLKN
PWR_CLKP
GND
R1211 0
R1214 0
D1202 MA3056H-TX
C1217 4p
R1215 1k
R1219 0
C1225 68p
R1225 0
R1226 0
C1226 68p
C1227 XX
T1200
C1214 10p
C1215 10p
C1216 0.1u
C1219 1000p
R1216 1k
R1220 10
C1222 22p
C1218 10u 16V
C1220 0.1u
D1201 1SS388(TPL3)
R1209 0
R1210 1k
R1212 1k
R1205 576k
JL1201
MOVEN
PWR+
POR
DIB_N
DIB_P
CLK
DVDD
DGND
R1222 0
JL1200
GPIO2
EIC
RXI
RXG
TRDC
DAC
VC
VREF
AVDD
AGND
EIF
EIO
TXO
TXF
TXA
ZUSO
IC1200
20463-11
C1210 0.1u
R1201 475k
R1204 270k
C1204 0.047u
C1205 1000p
R1203 820k
C1206 0.1u
C1211 0.1u
C1208 10u 16V
C1207 1000p
R1202 100k
RAC1
RAC2
TAC1
TAC2
RBIAS
ZWO
EIR
DCF
R1217 348k
R1218 33k
C1221 100p
Q1200 MPSA44
Q1201 CEN1000TR
Q1202 CEN1014TR
C1228 XX
R1223 100
R1221 150
C1224 XX
R1224 51k
R1227 24
C1223 0.047u
C1212 0.033u
R1206 1M
C1213 0.033u
R1207 1M
R1213 143k
D1200 S1ZB60-TL
R1200 6.8M
C1209 100p
R1208 330k
C1201 0.001u
C1202 0.001u
C1203 220p
JL1205
JL1206
J1200
C1200 XX
VDR001
VDR002
VDR003
LF1200

NOTE:

Critical Components are marked in red and have the critical symbol: ⚠

REF 1200 - 1299

UNIT	mm	TOLERANCE	USED ON	RANK
SCALE	:		ORIGINAL MODEL	ARX-5210(U)
MATERIAL(COLOR)			FINISH(COLOR)	

DESCRIPTION
(E)
(J) MODEM DAA
PART NO.
SHEET 13

HISTORY X COUNT | SUFFIX REPL. | ECN-NO. DATE | R E V I S I O N | SIGN.

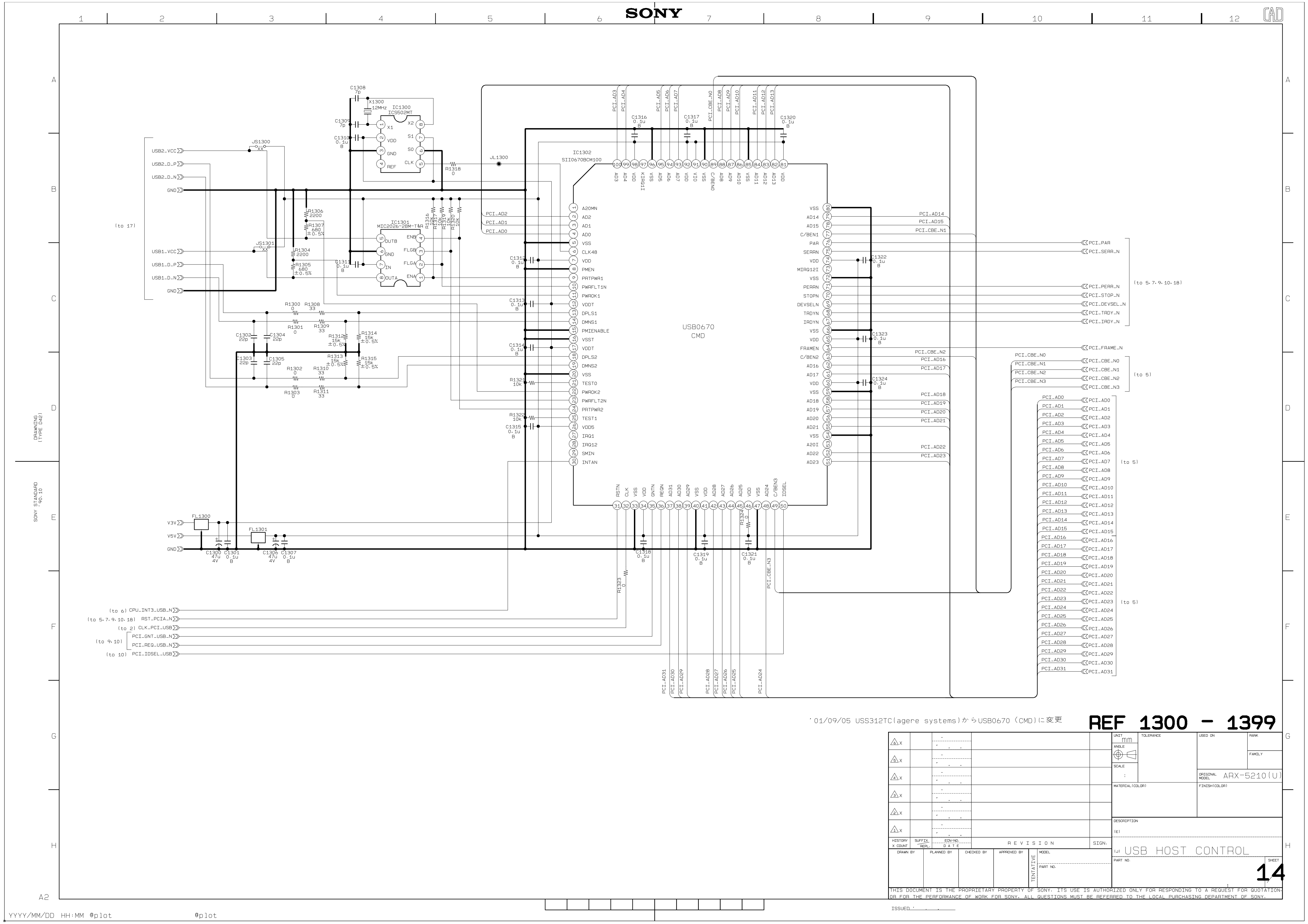
DRAWN BY | PLANNED BY | CHECKED BY | APPROVED BY | TENTATIVE | MODEL | PART NO.

THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.

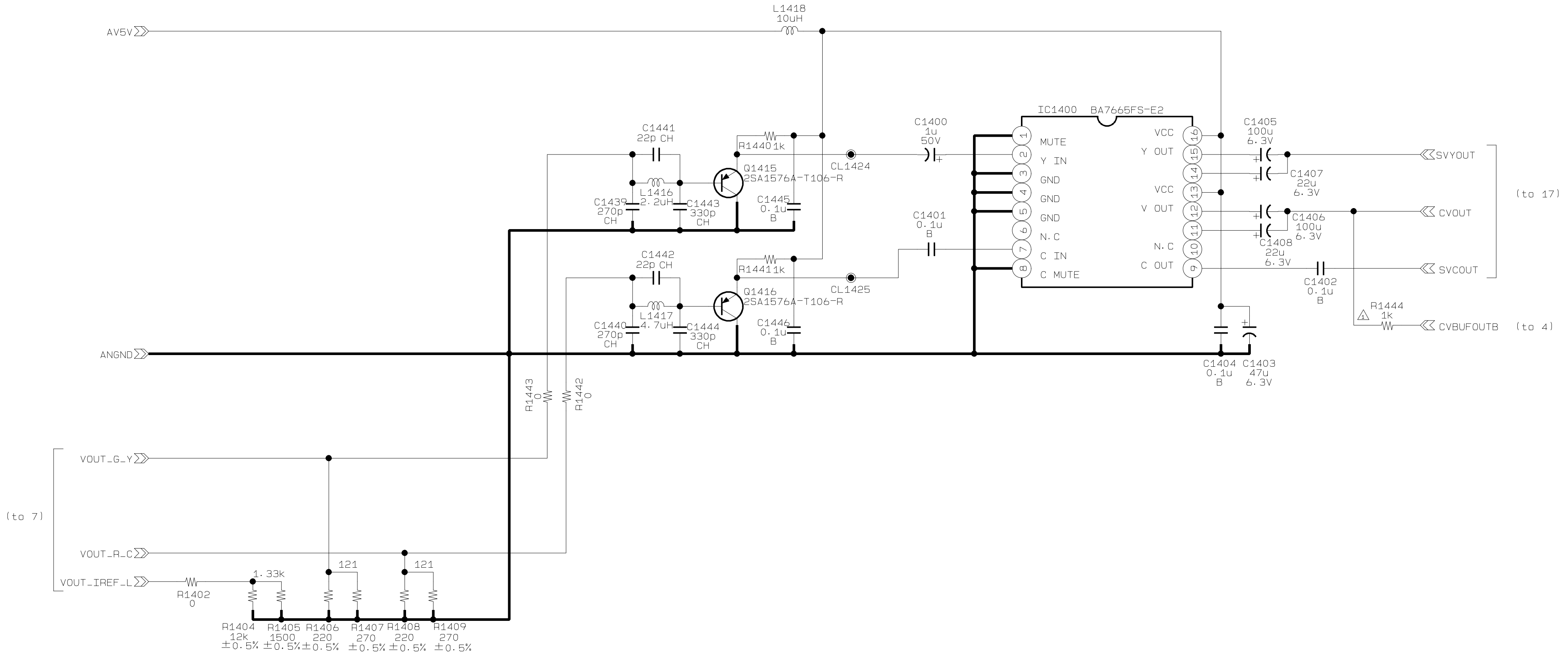
ISSUED

A3

YYYY/MM/DD HH:MM @plot @plot


SONY
IC1302
SII0670BCM100
USB0670
CMD
IC1300
ICS502MT
IC1301
MIC2026-2BM-T&R
X1300
12MHz
JL1300
JS1300
JS1301
FL1300
FL1301
USB2_VCC
USB2_D_P
USB2_D_N
GND
USB1_VCC
USB1_D_P
USB1_D_N
V3V
V5V
(to 17)
(to 6) CPU_INT3_USB_N
(to 5.7.9.10.18) RST_PCIA_N
(to 2) CLK_PCI_USB
(to 9.10) PCI_GNT_USB_N
PCI_REQ_USB_N
(to 10) PCI_IDSEL_USB
PCI_PAR
PCI_SERR_N
PCI_PERR_N
PCI_STOP_N
PCI_DEVSEL_N
PCI_TRDY_N
PCI_IRDY_N
(to 5.7.9.10.18)
PCI_FRAME_N
PCI_CBE_N0
PCI_CBE_N1
PCI_CBE_N2
PCI_CBE_N3
(to 5)
PCI_AD0 – PCI_AD31
(to 5)
(to 5)
'01/09/05 USS312TC(agere systems)からUSB0670（CMD)に変更
REF 1300 - 1399
UNIT mm
TOLERANCE
USED ON
RANK
FAMILY
ANGLE
SCALE
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) USB HOST CONTROL
PART NO.
SHEET
14
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED
A2
YYYY/MM/DD HH:MM @plot
@plot
DRAWING (TYPE D42)
SONY STANDARD 90.10

SONY


AV5V
L1418
10uH
C1441
22p CH
R1440 1k
Q1415
2SA1576A-T106-R
CL1424
L1416
2.2uH
C1439
270p
CH
C1443
330p
CH
C1445
0.1u
B
C1442
22p CH
R1441 1k
Q1416
2SA1576A-T106-R
CL1425
L1417
4.7uH
C1440
270p
CH
C1444
330p
CH
C1446
0.1u
B
ANGND
R1443
0
R1442
0
C1400
1u
50V
C1401
0.1u
B
IC1400 BA7665FS-E2
1 MUTE
2 Y IN
3 GND
4 GND
5 GND
6 N.C
7 C IN
8 C MUTE
16 VCC
15 Y OUT
14
13 VCC
12 V OUT
11
10 N.C
9 C OUT
C1405
100u
6.3V
C1407
22u
6.3V
C1406
100u
6.3V
C1408
22u
6.3V
C1402
0.1u
B
C1404
0.1u
B
C1403
47u
6.3V
R1444
1k
SVYOUT
CVOUT
SVCOUT
(to 17)
CVBUFOUTB
(to 4)
VOUT_G_Y
VOUT_R_C
VOUT_IREF_L
(to 7)
R1402
0
1.33k
121
121
R1404
12k
±0.5%
R1405
1500
±0.5%
R1406
220
±0.5%
R1407
270
±0.5%
R1408
220
±0.5%
R1409
270
±0.5%

定数要確認

（並列でTiVo定数にしている）

REF 1400 - 1499

HISTORY X COUNT	SUFFIX REPL.	ECN-NO. DATE	REVISION	SIGN.
6 X				
5 X				
4 X				
3 X				
2 X				
1 X				

DRAWN BY | PLANNED BY | CHECKED BY | APPROVED BY | TENTATIVE | MODEL | PART NO.

UNIT mm

ANGLE

SCALE :

TOLERANCE

USED ON

RANK

FAMILY

ORIGINAL MODEL ARX-5210(U)

MATERIAL(COLOR)

FINISH(COLOR)

DESCRIPTION

(E)

(J) NTSC VIDEO ENCODER

PART NO. 1-686-359-11

SHEET 15

THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.

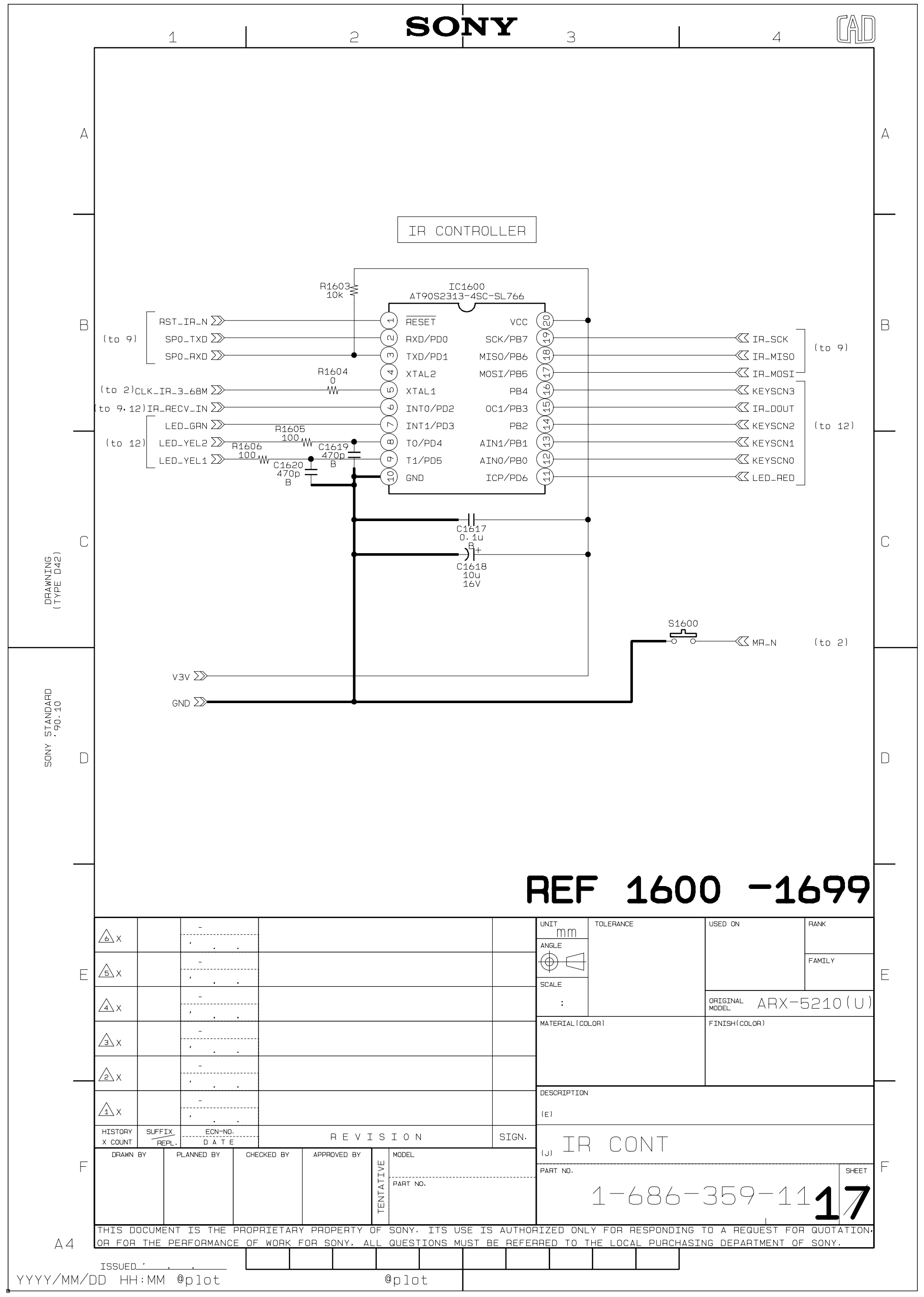
ISSUED ' . .

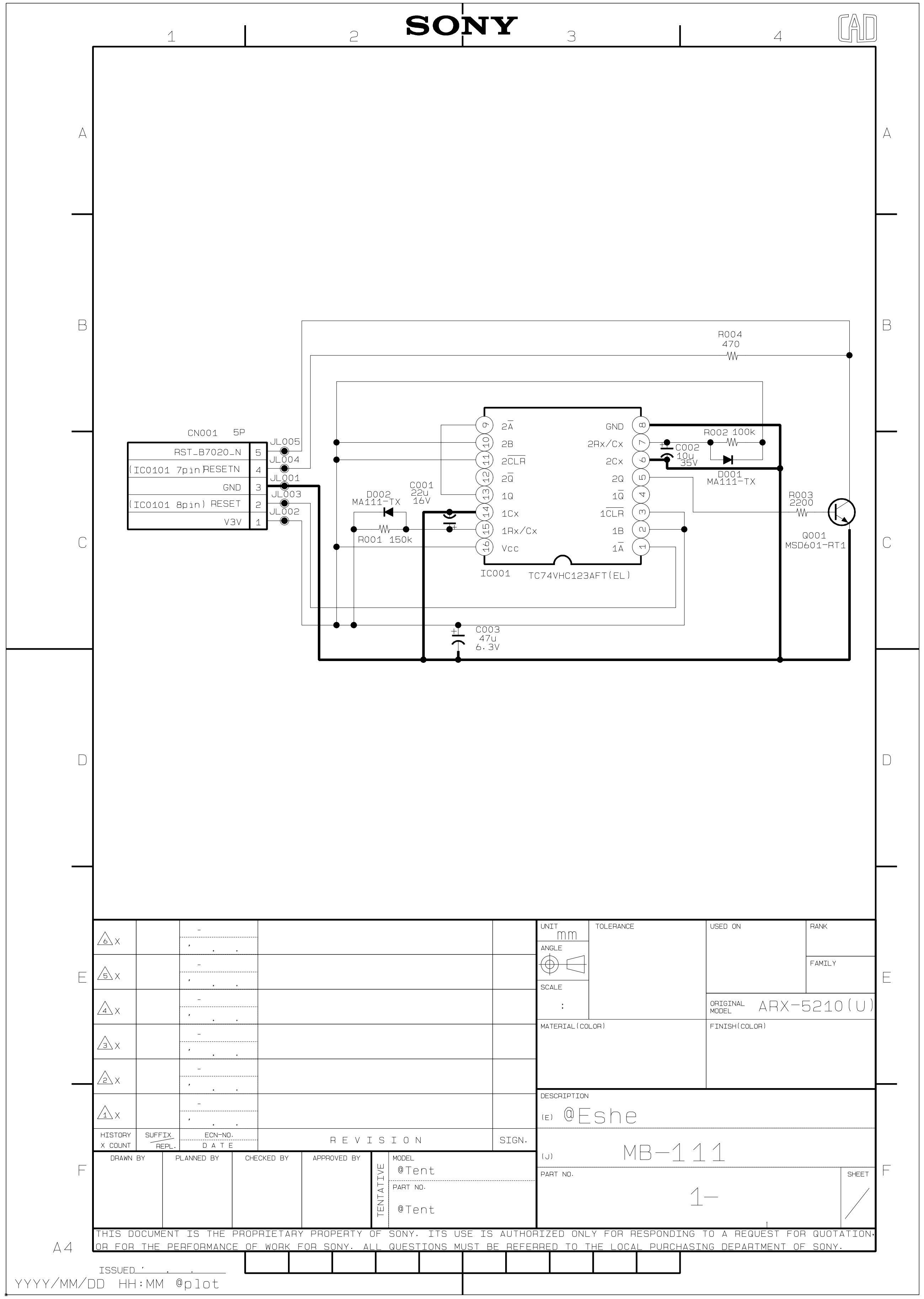
DRAWING (TYPE D42)

SONY STANDARD '90.10

A3

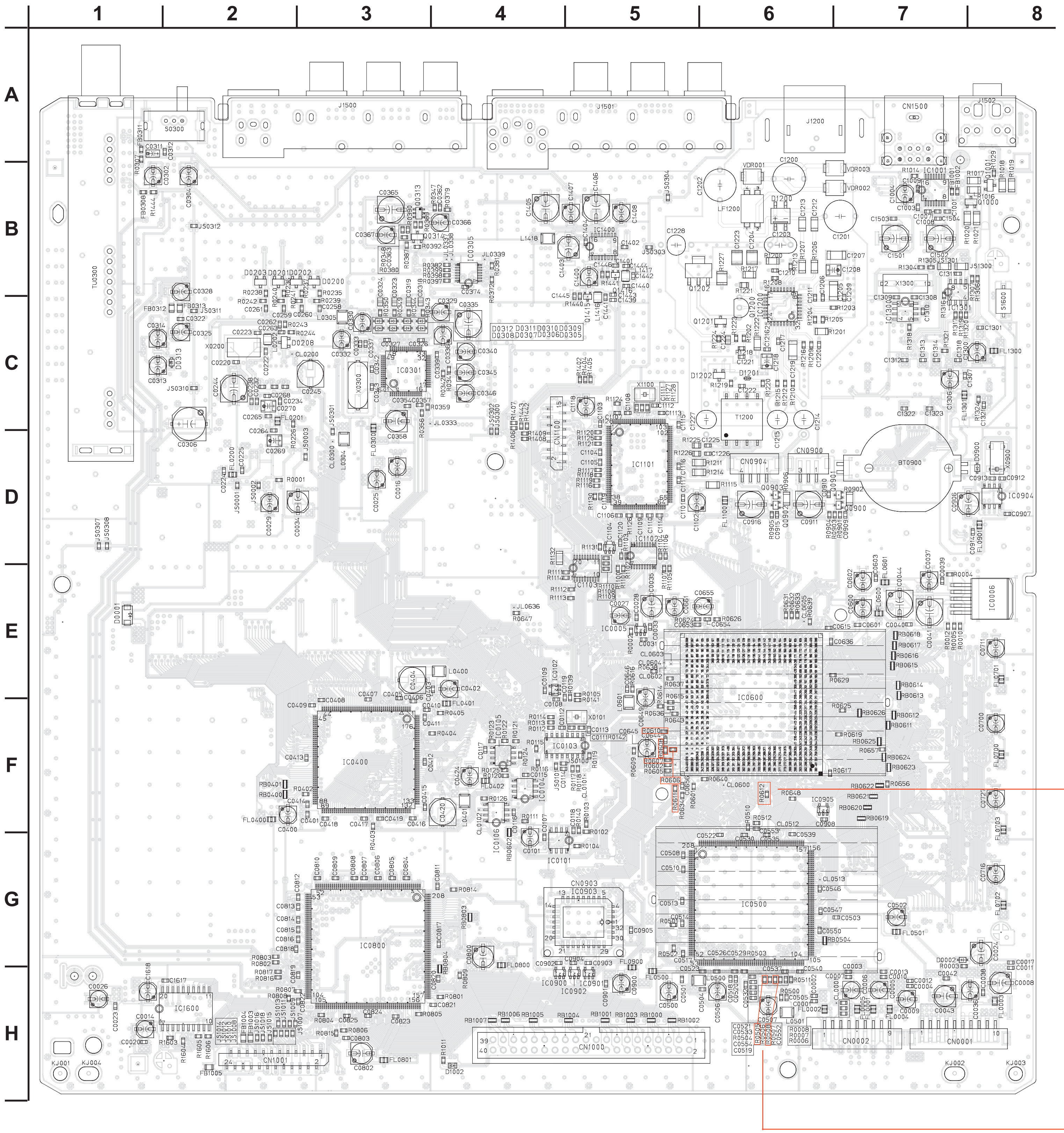
YYYY/MM/DD HH:MM @plot @plot


SONY
IR CONTROLLER
IC1600
AT90S2313-4SC-SL766
R1603 10k
R1604 0
R1605 100
R1606 100
C1619 470p B
C1620 470p B
C1617 0.1u B
C1618 10u 16V
S1600
RST_IR_N
SP0_TXD
SP0_RXD
(to 9)
(to 2) CLK_IR_3_68M
(to 9,12) IR_RECV_IN
LED_GRN
LED_YEL2
LED_YEL1
(to 12)
RESET
RXD/PD0
TXD/PD1
XTAL2
XTAL1
INT0/PD2
INT1/PD3
T0/PD4
T1/PD5
GND
VCC
SCK/PB7
MISO/PB6
MOSI/PB5
PB4
OC1/PB3
PB2
AIN1/PB1
AIN0/PB0
ICP/PD6
IR_SCK
IR_MISO
IR_MOSI
KEYSCN3
IR_DOUT
KEYSCN2
KEYSCN1
KEYSCN0
LED_RED
MR_N
V3V
GND
DRAWNING (TYPE D42)
SONY STANDARD '90.10
REF 1600 -1699
UNIT mm
ORIGINAL MODEL ARX-5210(U)
DESCRIPTION
IR CONT
PART NO.
1-686-359-11
SHEET 17
REVISION
TENTATIVE
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION. OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
A4
ISSUED
YYYY/MM/DD HH:MM @plot
@plot


SONY
CN001 5P
RST_B7020_N
(IC0101 7pin) RESETN
GND
(IC0101 8pin) RESET
V3V
JL005
JL004
JL001
JL003
JL002
IC001
TC74VHC123AFT(EL)
2A
2B
2CLR
2Q
1Q
1Cx
1Rx/Cx
Vcc
GND
2Rx/Cx
2Cx
2Q
1Q
1CLR
1B
1A
R004 470
R002 100k
C002 10u 35V
D001 MA111-TX
D002 MA111-TX
C001 22u 16V
R001 150k
R003 2200
Q001 MSD601-RT1
C003 47u 6.3V
UNIT mm
ORIGINAL MODEL ARX-5210(U)
DESCRIPTION
@Eshe
MB-111
PART NO.
1-
@Tent
@Tent
REVISION
TENTATIVE
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION. OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
A4
ISSUED
YYYY/MM/DD HH:MM @plot

MA-422 [MAIN BOARD]

COMPONENT SIDE

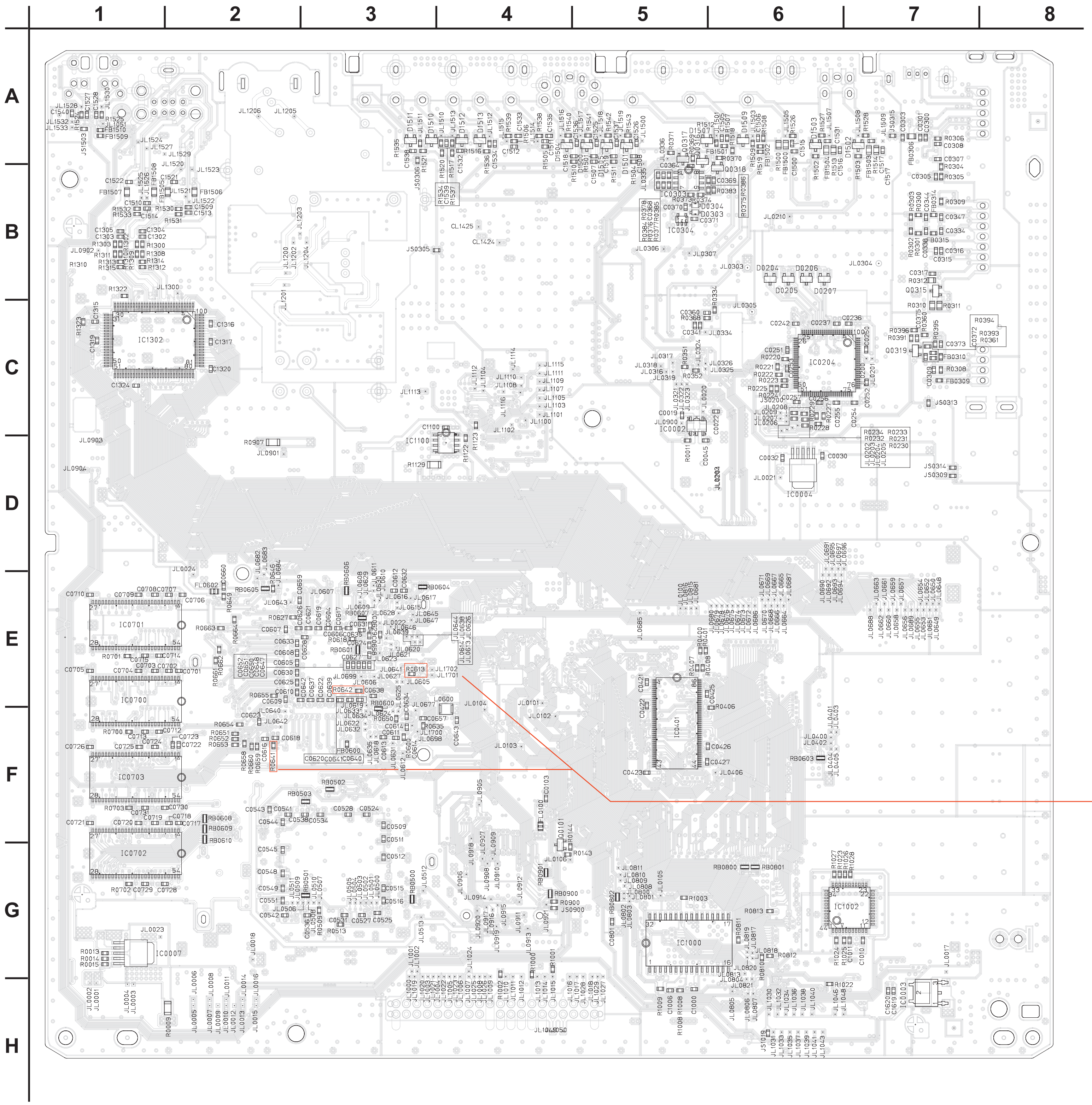

1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
IC0600
IC0500
IC0400
IC0800
IC1101
IC0301
IC0103
IC1600
CN1000
CN1001
CN0001
CN0002
J1500
J1501
J1200
J1502
CN1500
BT0900

NOTE:
When replacing IC0600 make sure R0606, R0607, R0608, R0610, R0611 & R0612 remain properly mounted and positioned.

NOTE:
When replacing IC0500 make sure R0505 & R0508 remain properly mounted and positioned.

MA-422 [MAIN BOARD]

CONDUCTOR SIDE

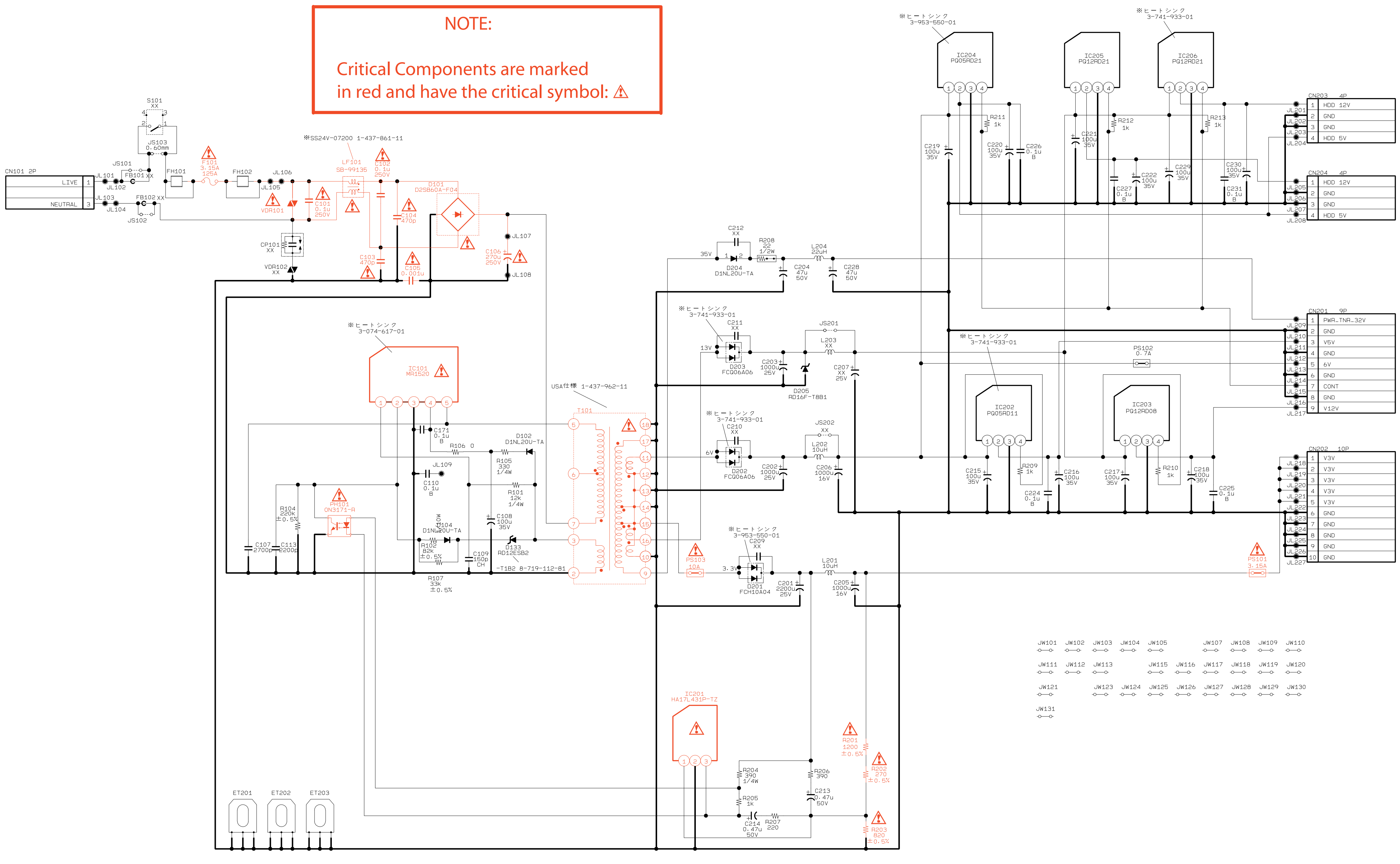

1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
IC1302
IC0204
IC0701
IC0700
IC0703
IC0702
IC1000
IC1002
IC0007
IC0004
IC1100
IC0304

NOTE:
When replacing IC0600 make sure R0613, R0641 & R0642 remain properly mounted and positioned.

SONY

NOTE:

Critical Components are marked in red and have the critical symbol: ⚠


CN101 2P
LIVE
NEUTRAL
JL101
JL102
JL103
JL104
S101 XX
JS101
JS102
JS103 0.60mm
FB101 XX
FB102 XX
FH101
FH102
F101 3.15A 125A
JL105
JL106
※SS24V-07200 1-437-861-11
LF101 SB-99135
C102 0.1u 250V
C101 0.1u 250V
VDR101
VDR102 XX
CP101 XX
D101 D2SB60A-F04
C104 470p
C103 470p
C105 0.001u
C106 270u 250V
JL107
JL108
※ヒートシンク 3-074-617-01
IC101 MR1520
C171 0.1u B
R106 0
D102 D1NL20U-TA
R105 330 1/4W
JL109
C110 0.1u B
R101 12k 1/4W
C108 100u 35V
D104 D1NL20U-TA
R102 82k ±0.5%
R104 220k ±0.5%
PH101 ON3171-R
C107 2700p
C113 2200p
R107 33k ±0.5%
C109 150p CH
D133 RD12ESB2
-T182 8-719-112-81
USA仕様 1-437-962-11
T101
C212 XX
R208 22 1/2W
35V
D204 D1NL20U-TA
C204 47u 50V
L204 22uH
C228 47u 50V
※ヒートシンク 3-741-933-01
C211 XX
13V
D203 FCQ06A06
C203 1000u 25V
JS201
L203 XX
C207 XX 25V
D205 RD16F-T8B1
※ヒートシンク 3-741-933-01
C210 XX
6V
D202 FCQ06A06
C202 1000u 25V
JS202 XX
L202 10uH
C206 1000u 16V
PS103 10A
※ヒートシンク 3-953-550-01
C209 XX
3.3V
D201 FCH10A04
C201 2200u 25V
L201 10uH
C205 1000u 16V
IC201 H417L431P-TZ
R201 1200 ±0.5%
R202 870 ±0.5%
R203 820 ±0.5%
R204 390 1/4W
R205 1k
C214 0.47u 50V
R207 220
R206 390
C213 0.47u 50V
ET201
ET202
ET203
※ヒートシンク 3-953-550-01
IC204 PQ05RD21
※ヒートシンク 3-741-933-01
IC205 PQ12RD21
IC206 PQ12RD21
R211 1k
R212 1k
R213 1k
C219 100u 35V
C220 100u 35V
C226 0.1u B
C221 100u 35V
C222 100u 35V
C227 0.1u B
C229 100u 35V
C230 100u 35V
C231 0.1u B
CN203 4P
1 HDD 12V
2 GND
3 GND
4 HDD 5V
JL201
JL202
JL203
JL204
CN204 4P
1 HDD 12V
2 GND
3 GND
4 HDD 5V
JL205
JL206
JL207
JL208
※ヒートシンク 3-741-933-01
PS102 0.7A
IC202 PQ05RD11
IC203 PQ12RD08
R209 1k
R210 1k
C215 100u 35V
C216 100u 35V
C224 0.1u B
C217 100u 35V
C218 100u 35V
C225 0.1u B
CN201 9P
1 PWR_TNR_32V
2 GND
3 V5V
4 GND
5 6V
6 GND
7 CONT
8 GND
9 V12V
JL209
JL210
JL211
JL212
JL213
JL214
JL215
JL216
JL217
CN202 10P
1 V3V
2 V3V
3 V3V
4 V3V
5 V3V
6 GND
7 GND
8 GND
9 GND
10 GND
JL218
JL219
JL220
JL221
JL222
JL223
JL224
JL225
JL226
JL227
PS101 3.15A
JW101 JW102 JW103 JW104 JW105 JW107 JW108 JW109 JW110
JW111 JW112 JW113 JW115 JW116 JW117 JW118 JW119 JW120
JW121 JW123 JW124 JW125 JW126 JW127 JW128 JW129 JW130
JW131

< M't メカ部品　一覧 >

M't メカ部品種類	部品番号	QTY	名称	US	REMARKS	PS Reference
各種Mtメカ部品	307461701	1	ヒートシンク(IC101)	@Us	@Rema	@PsRe
各種Mtメカ部品	768254709	1	ビス +BVTT 3×8	@Us	@Rema	@PsRe
@MtMe	374193301	4	ヒートシンク(D202,203)	@Us	@Rema	@PsRe
@MtMe	395355001	2	ヒートシンク(D201,IC204	@Us	@Rema	@PsRe
各種Mtメカ部品	768564671	6	ビス +BVTP 3×8	@Us	@Rema	@PsRe

6 X		-		
5 X		-		
4 X		-		
3 X		-		
2 X		-		
1 X		-		
HISTORY X COUNT	SUFFIX / REPL.	ECN-NO. DATE	R E V I S I O N	SIGN.

DRAWN BY	PLANNED BY	CHECKED BY	APPROVED BY	TENTATIVE	MODEL PART NO.

UNIT mm
ANGLE
SCALE :
TOLERANCE
USED ON
RANK
FAMILY
ORIGINAL MODEL
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E) POWER SUPPLY
(J) PS-US 回路図
PART NO.
SHEET

THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.

ISSUED ' . .

DRAWING (TYPE D42)

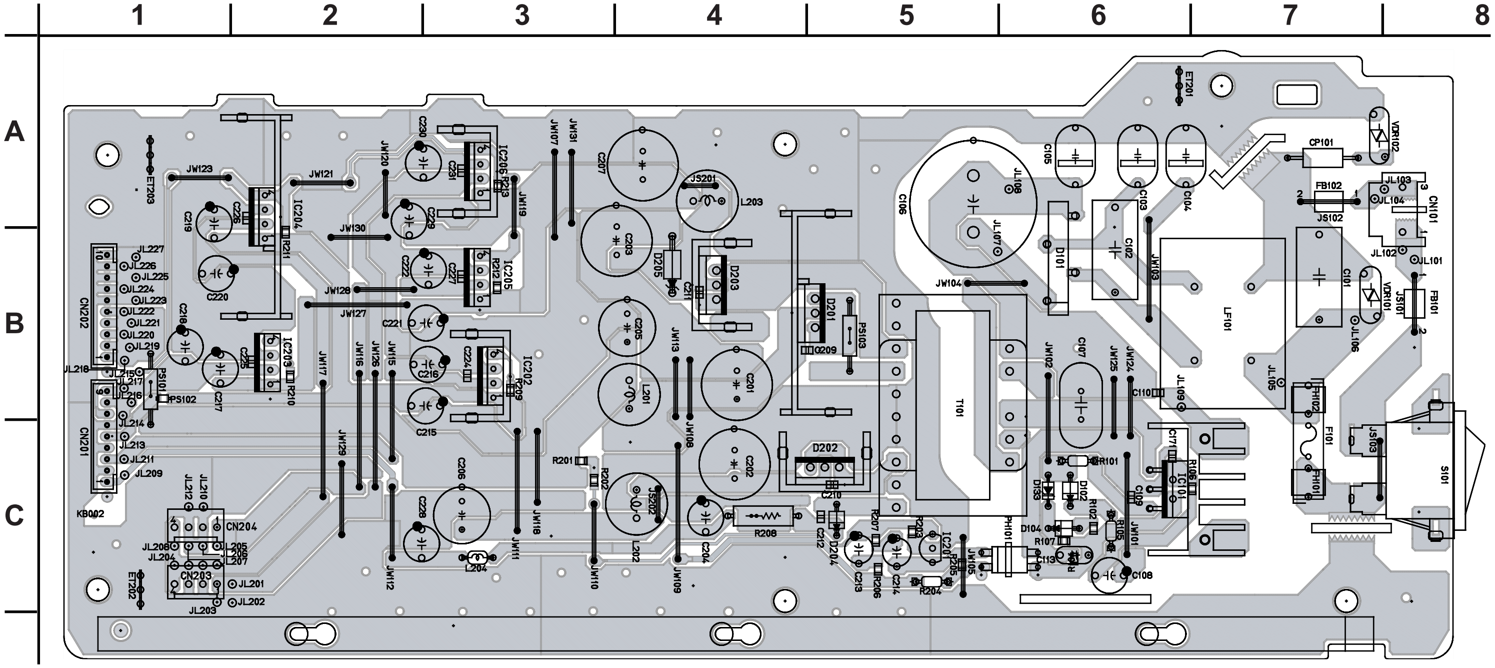
SONY STANDARD '90.10

A2

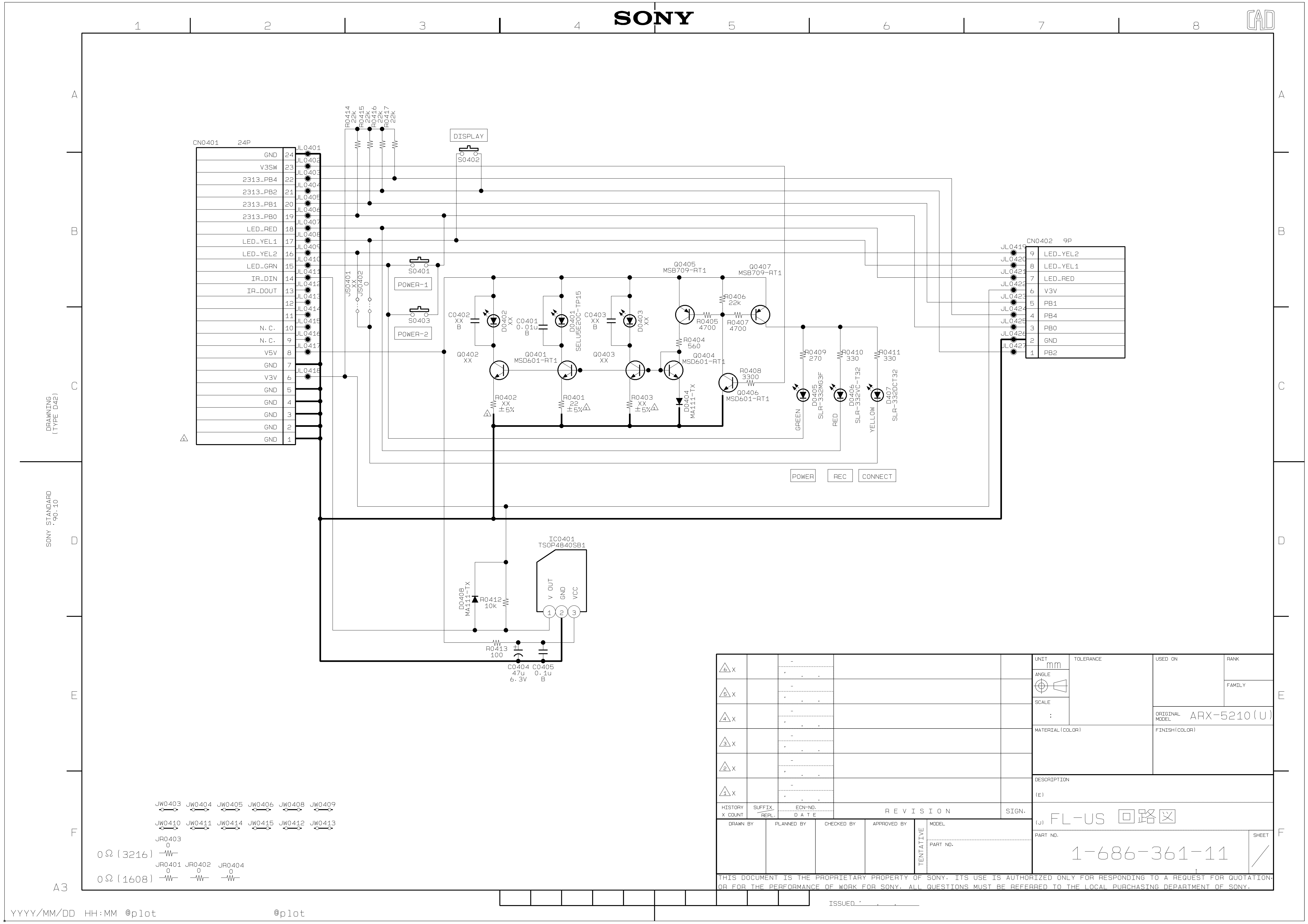
YYYY/MM/DD HH:MM @plot @plot

PS-449 [SWITCHING REGULATOR]

COMPONENT SIDE

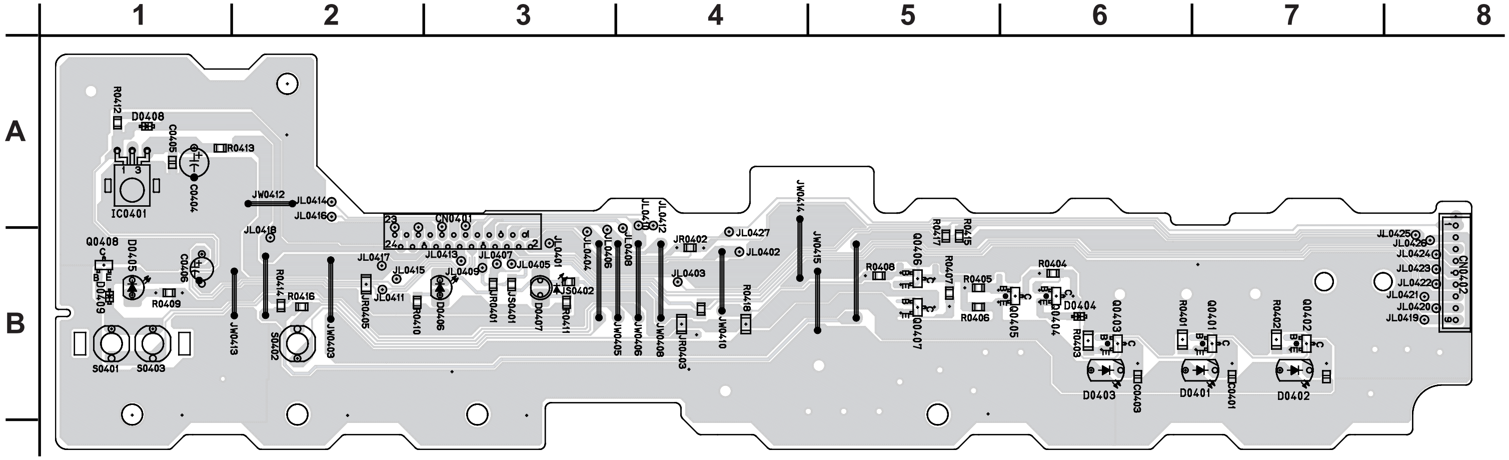

1
2
3
4
5
6
7
8
A
B
C
CN202
CN201
CN203
CN204
CN101
IC201
IC202
IC203
IC204
IC205
IC206
IC101
T101
LF101
D201
D202
D203
D205
D101
PS101
PS102
PS103
F101
S101
CP101
FB101
FB102
VDR101
VDR102
PH101
ET201
ET202
ET203
R208
R204
C101
C102
C103
C104
C105
C106
C107
C201
C202
C203
C205
C206
C207
L201
L202
L203

FL-127 BOARD SCHEMATIC DIAGRAM

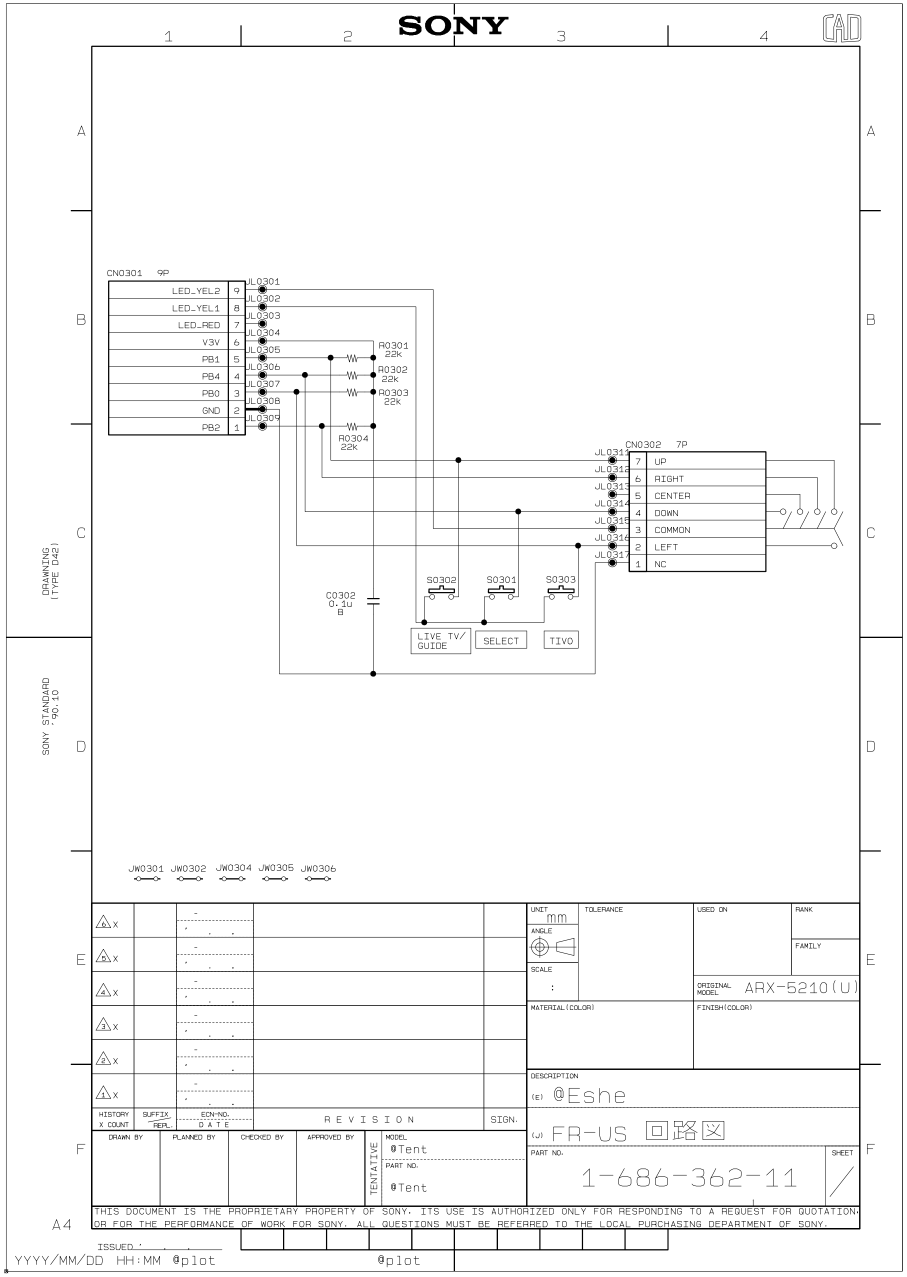

SONY
CN0401 24P
GND 24
V3SW 23
2313_PB4 22
2313_PB2 21
2313_PB1 20
2313_PB0 19
LED_RED 18
LED_YEL1 17
LED_YEL2 16
LED_GRN 15
IR_DIN 14
IR_DOUT 13
12
11
N.C. 10
N.C. 9
V5V 8
GND 7
V3V 6
GND 5
GND 4
GND 3
GND 2
GND 1
JL0401 … JL0418
R0414 22k
R0415 22k
R0416 22k
R0417 22k
DISPLAY
S0402
S0401
POWER-1
S0403
POWER-2
JS0401 XX
JS0402 0
C0402 XX B
D0402 XX
C0401 0.01u B
D0401 SELU5E20C-TP15
C0403 XX B
D0403 XX
Q0402 XX
Q0401 MSD601-RT1
Q0403 XX
R0402 XX ±5%
R0401 22 ±5%
R0403 XX ±5%
Q0405 MSB709-RT1
Q0407 MSB709-RT1
R0406 22k
R0405 4700
R0407 4700
R0404 560
Q0404 MSD601-RT1
D0404 MA111-TX
R0408 3300
Q0406 MSD601-RT1
R0409 270
R0410 330
R0411 330
D0405 SLR-332MG3F
D0406 SLR-332VC-T32
D0407 SLR-332DCT32
GREEN
RED
YELLOW
POWER
REC
CONNECT
CN0402 9P
JL0419 … JL0427
9 LED_YEL2
8 LED_YEL1
7 LED_RED
6 V3V
5 PB1
4 PB4
3 PB0
2 GND
1 PB2
IC0401 TSOP4840SB1
V OUT
GND
VCC
D0408 MA111-TX
R0412 10k
R0413 100
C0404 47u 6.3V
C0405 0.1u B
JW0403 JW0404 JW0405 JW0406 JW0408 JW0409
JW0410 JW0411 JW0414 JW0415 JW0412 JW0413
JR0403 0
0Ω (3216)
JR0401 0 JR0402 0 JR0404 0
0Ω (1608)
A3
DRAWING (TYPE D42)
SONY STANDARD 40.10
HISTORY X COUNT
SUFFIX REPL.
ECN-NO. DATE
REVISION
SIGN.
DRAWN BY
PLANNED BY
CHECKED BY
APPROVED BY
TENTATIVE
MODEL
PART NO.
UNIT mm
TOLERANCE
USED ON
RANK
FAMILY
ANGLE
SCALE
ORIGINAL MODEL ARX-5210(U)
MATERIAL(COLOR)
FINISH(COLOR)
DESCRIPTION
(E)
(J) FL-US 回路図
PART NO.
SHEET
1-686-361-11
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION, OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.
ISSUED
YYYY/MM/DD HH:MM @plot
@plot

FL-134 [FUNCTION INDICATOR]

COMPONENT SIDE


1
2
3
4
5
6
7
8
A
B
R0412
D0408
C0405
R0413
IC0401
C0404
JW0412
JL0414
JL0416
CN0411
23
24
Q0408
D0405
C0406
D0409
R0409
JL0418
R0414
R0416
JW0413
S0402
JW0403
S0401
S0403
JL0417
JL0415
JL0411
JR0405
JL0413
JL0407
JL0409
D0406
R0410
JL0405
JR0401
JS0401
D0407
JL0401
S0402
JR0411
JL0404
JL0406
JL0408
JL0410
JL0412
JW0404
JW0405
JW0406
JW0408
JR0402
JL0427
JL0402
JL0403
JR0403
JW0410
R0418
JW0414
JW0415
Q0406
R0417
R0415
R0408
R0407
Q0407
R0405
R0406
Q0405
R0404
D0404
Q0404
Q0403
R0403
D0403
C0403
R0401
Q0401
D0401
C0401
R0402
Q0402
D0402
JL0425
JL0426
JL0424
JL0423
JL0422
JL0421
JL0420
JL0419
CN0402

FR-134 BOARD SCHEMATIC DIAGRAM


SONY
1
2
3
4
A
B
C
D
E
F
DRAWING (TYPE D42)
SONY STANDARD '90.10
CN0301 9P
LED_YEL2 9
LED_YEL1 8
LED_RED 7
V3V 6
PB1 5
PB4 4
PB0 3
GND 2
PB2 1
JL0301
JL0302
JL0303
JL0304
JL0305
JL0306
JL0307
JL0308
JL0309
R0301 22k
R0302 22k
R0303 22k
R0304 22k
CN0302 7P
JL0311
JL0312
JL0313
JL0314
JL0315
JL0316
JL0317
7 UP
6 RIGHT
5 CENTER
4 DOWN
3 COMMON
2 LEFT
1 NC
C0302 0.1u B
S0302
S0301
S0303
LIVE TV/ GUIDE
SELECT
TIVO
JW0301
JW0302
JW0304
JW0305
JW0306
A4

6 X		- , . .		
5 X		- , . .		
4 X		- , . .		
3 X		- , . .		
2 X		- , . .		
1 X		- , . .		
HISTORY X COUNT	SUFFIX REPL.	ECN-NO. DATE	REVISION	SIGN.

DRAWN BY	PLANNED BY	CHECKED BY	APPROVED BY	TENTATIVE
				MODEL @Tent PART NO. @Tent

UNIT mm

ANGLE

SCALE :

TOLERANCE

USED ON

RANK

FAMILY

ORIGINAL MODEL ARX-5210(U)

MATERIAL(COLOR)

FINISH(COLOR)

DESCRIPTION

(E) @Eshe

(J) FR-US 回路図

PART NO. 1-686-362-11

SHEET /

THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF SONY. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION. OR FOR THE PERFORMANCE OF WORK FOR SONY. ALL QUESTIONS MUST BE REFERRED TO THE LOCAL PURCHASING DEPARTMENT OF SONY.

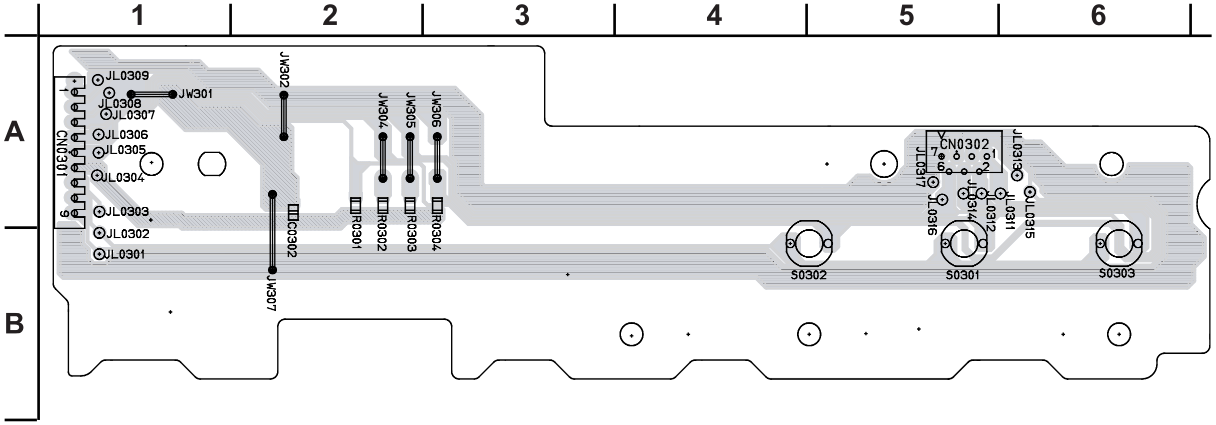
ISSUED ' . .

YYYY/MM/DD HH:MM @plot

@plot

FR-198 [FUNCTION KEY]

COMPONENT SIDE


1
2
3
4
5
6
A
B
CN0301
1
9
JL0309
JL0308
JL0307
JL0306
JL0305
JL0304
JL0303
JL0302
JL0301
JW301
JW302
JW304
JW305
JW306
JW307
C0302
R0301
R0302
R0303
R0304
CN0302
7
6
1
2
JL0317
JL0316
JL0314
JL0312
JL0311
JL0313
JL0315
S0302
S0301
S0303

SECTION 3: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

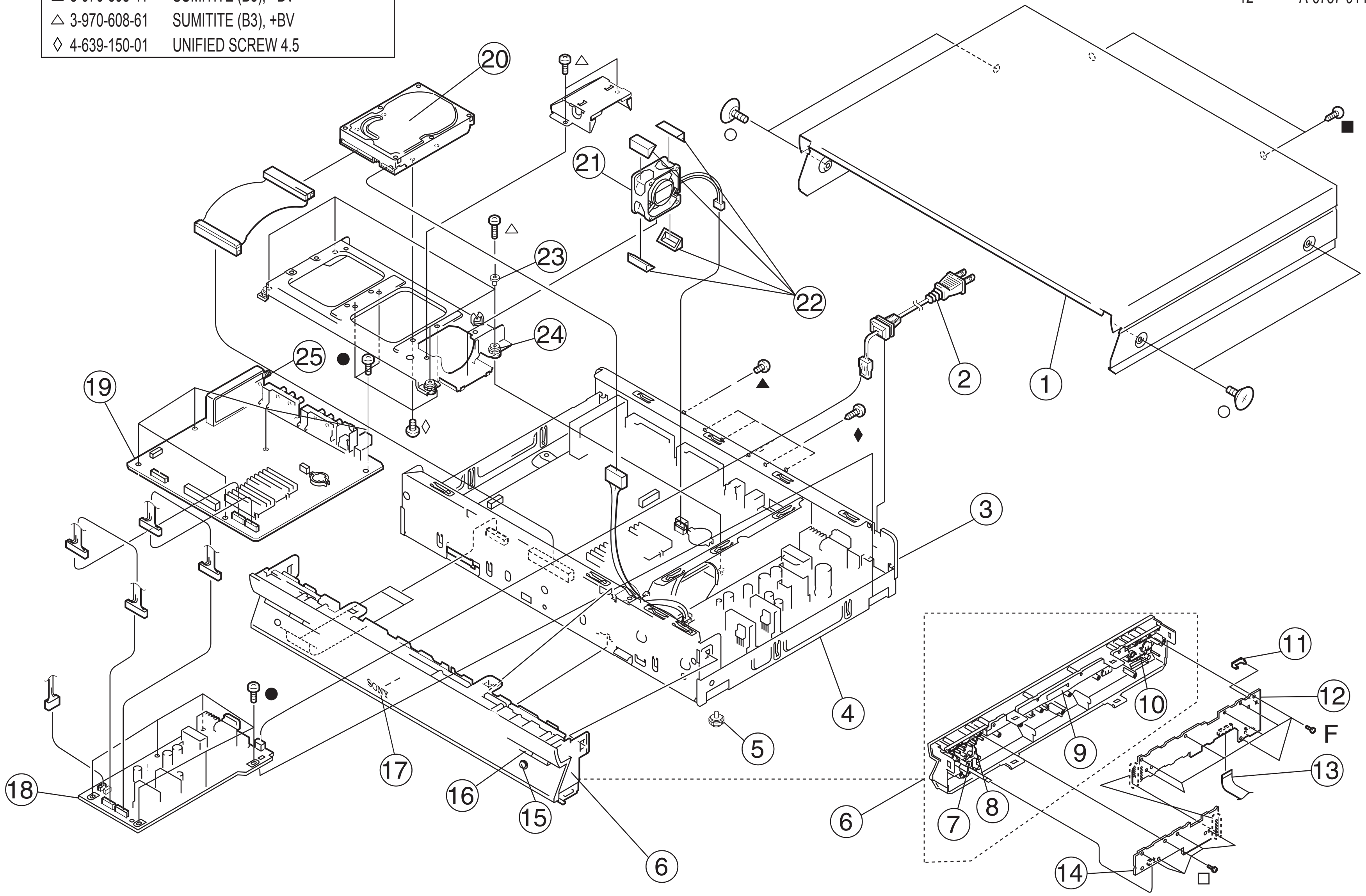
*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

3-1. CHASSIS

●	3-058-511-11	+BV IBR
■	3-077-331-01	+BV3 (3-CR)
▲	4-951-620-71	SCREW (2.6)
⧫	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3
○	3-070-883-11	SCREW, TAPPING
□	3-970-608-11	SUMITITE (B3), +BV
△	3-970-608-61	SUMITITE (B3), +BV
◇	4-639-150-01	UNIFIED SCREW 4.5



REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES
1	3-074-858-01	CASE, UPPER	
⚠ 2	1-824-774-11	CORD, POWER	
3	3-078-359-01	PANEL (USA), BACK	
4	3-074-852-11	CHASSIS	
5	3-052-379-01	FOOT (AH)	
6	X-3952-845-1	PANEL ASSY, FRONT	(7-10)
7	3-074-873-01	SW HOLDER	
8	1-771-913-11	SWITCH, TACTILE	
9	3-074-870-11	LENS, CENTER	
10	X-3952-846-1	BUTTON (PW) ASSY	
11	3-075-986-02	PLATE, PUSH	
12	A-6787-914-A	FL-134 BOARD, MOUNTED	

REF.NO.	PART NO.	DESCRIPTION
* 13	1-824-773-11	CABLE, FLAT (FMF-002)
14	A-6787-915-A	FR-198 BOARD, MOUNTED
15	3-074-872-01	CAP, BUTTON
16	X-3952-847-1	BUTTON (MN) ASSY
17	4-969-961-11	EMBLEM (NO.4), SONY
18	A-6787-911-A	PS-449 BOARD, COMPLETE
19	A-6787-909-A	MA-422 BOARD, COMPLETE
20	1-796-676-11	DISK, HARD (80GB)
21	1-763-816-11	FAN, D.C.
22	3-074-851-01	DAMPER (FAN 25)
23	3-074-848-01	COLLAR (SY), FLANGE
24	3-074-849-01	DAMPER (SY)
25	1-693-597-11	TUNER

SECTION 4: ELECTRICAL PARTS LIST

MA-422

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

RESISTORS

- **All resistors are in ohms**
- **F : nonflammable**
- **All variable and adjustable resistors have characteristic curve B, unless otherwise noted.**

When ordering parts by reference number, please include the board name.

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-6787-909-A**	**MA-422 BOARD, COMPLETE**			
	1-528-174-11	BATTERY, LITHIUM (CR2032 TYPE)			
	3-075-711-01	HEAT SINK (IC)			
	LITHIUM BATTERY				
BT0900	1-756-076-21	HOLDER, LITHIUM BATTERY			
	CAPACITOR				
C0002	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0004	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C0005	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0006	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0007	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0008	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0009	1-128-996-11	ELECT CHIP	4.7µF	20%	50V
C0010	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0011	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0014	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0016	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0019	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0020	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0022	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0023	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0024	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0025	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0026	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0027	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0028	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0029	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0030	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0031	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0032	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0033	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0034	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0035	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0036	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0037	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0038	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0039	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0040	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0041	1-126-246-11	ELECT CHIP	220µF	20%	4V
C0042	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0043	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0045	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0101	1-126-607-11	ELECT CHIP	47µF	20%	4V
C0103	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0107	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0108	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0111	1-162-909-11	CERAMIC CHIP	4pF	0.25pF	50V
C0112	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0113	1-162-909-11	CERAMIC CHIP	4pF	0.25pF	50V
C0114	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0115	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0116	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0117	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0139	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C0140	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0141	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0220	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C0222	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C0223	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C0224	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0225	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0231	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0232	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C0233	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0234	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C0235	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C0236	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0237	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0238	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C0242	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0244	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C0245	1-135-595-21	ELECT	100μF	20%	6.3V
C0250	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0251	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0252	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0253	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0254	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0255	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0256	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0257	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0258	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C0259	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C0261	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C0263	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C0264	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0265	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0268	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0269	1-110-569-11	TANTAL. CHIP	47μF	20%	6.3V
C0270	1-110-569-11	TANTAL. CHIP	47μF	20%	6.3V
C0300	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0302	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0303	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0304	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0305	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0306	1-128-398-11	ELECT CHIP	220μF	20%	16V
C0308	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0311	1-104-915-11	TANTAL. CHIP	2.2μF	20%	20V
C0312	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C0313	1-128-996-11	ELECT CHIP	4.7μF	20%	50V
C0314	1-128-996-11	ELECT CHIP	4.7μF	20%	50V
C0315	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0316	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0317	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C0322	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0323	1-125-838-11	CERAMIC CHIP	2.2μF	10%	6.3V
C0324	1-125-838-11	CERAMIC CHIP	2.2μF	10%	6.3V
C0325	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0326	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0327	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0328	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0329	1-126-601-11	ELECT CHIP	2.2μF	20%	50V
C0330	1-126-601-11	ELECT CHIP	2.2μF	20%	50V
C0331	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C0332	1-126-601-11	ELECT CHIP	2.2μF	20%	50V
C0333	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0334	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C0335	1-126-204-11	ELECT CHIP	47μF	20%	16V
C0336	1-126-601-11	ELECT CHIP	2.2μF	20%	50V
C0337	1-162-967-11	CERAMIC CHIP	0.0033μF	10%	50V
C0339	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0340	1-126-601-11	ELECT CHIP	2.2μF	20%	50V
C0341	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C0342	1-162-909-11	CERAMIC CHIP	4pF	0.25pF	50V
C0343	1-162-909-11	CERAMIC CHIP	4pF	0.25pF	50V
C0345	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0346	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0347	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C0354	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0357	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C0358	1-126-205-11	ELECT CHIP	47μF	20%	6.3V
C0360	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C0362	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C0363	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C0364	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0365	1-126-204-11	ELECT CHIP	47μF	20%	16V
C0366	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0367	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0368	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C0369	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C0370	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0371	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0372	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C0373	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0374	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0375	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0400	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0401	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0402	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0403	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0404	1-135-600-21	ELECT	22μF	20%	20V
C0405	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C0406	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0407	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0408	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0409	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0410	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0411	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0412	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0413	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0414	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0415	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0416	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0417	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0418	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0419	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0420	1-135-600-21	ELECT	22µF	20%	20V
C0421	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0422	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0423	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0424	1-126-607-11	ELECT CHIP	47µF	20%	4V
C0425	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0426	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0427	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0500	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0501	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0502	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0503	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0504	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0505	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0506	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0507	1-124-779-00	ELECT CHIP	10µF	20%	16V
C0508	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0509	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0510	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0511	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0512	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0513	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0514	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0515	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0516	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0517	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0518	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0519	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0520	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C0521	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C0522	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0523	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0524	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0525	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0526	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0527	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0528	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0529	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0530	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0531	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0532	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C0533	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C0534	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0535	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0536	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0537	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0538	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0539	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0540	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0541	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0542	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0543	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0544	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0545	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0546	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0547	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0548	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0549	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0550	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0551	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0552	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0553	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0554	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0600	1-126-607-11	ELECT CHIP	47µF	20%	4V
C0601	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0602	1-126-607-11	ELECT CHIP	47µF	20%	4V
C0603	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0604	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0605	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0606	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0607	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C0608	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0609	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0610	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0611	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0612	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0613	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0614	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0615	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0616	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0617	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0618	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0619	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0620	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0621	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0622	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0623	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0624	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0625	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0626	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0627	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0628	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0629	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0630	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0631	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0632	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0633	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0634	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0635	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0636	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0637	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0638	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0639	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0640	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0641	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0642	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0643	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0644	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0645	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0646	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0647	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0648	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0649	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0650	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0651	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0652	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0653	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0654	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0655	1-124-779-00	ELECT CHIP	10μF	20%	16V
C0658	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0659	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0660	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0661	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0700	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0701	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0702	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0703	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0704	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0705	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0706	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0707	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0708	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0709	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0710	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0711	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0712	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0713	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0714	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0715	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0716	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0717	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0718	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0719	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0720	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0721	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0722	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0723	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0724	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0725	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0726	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0727	1-126-607-11	ELECT CHIP	47μF	20%	4V
C0728	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0729	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0730	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0731	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C0800	1-126-205-11	ELECT CHIP	47μF	20%	6.3V

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C0801	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0802	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0803	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0804	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0805	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0806	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0807	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0808	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0809	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0810	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0811	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0812	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0813	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0814	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0815	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0816	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0817	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0818	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0819	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0820	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0821	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0822	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0823	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0824	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0825	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0900	1-126-607-11	ELECT CHIP	47µF	20%	4V
C0901	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0902	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0903	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0904	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0905	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0906	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C0907	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0908	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0909	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C0910	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C0912	1-162-909-11	CERAMIC CHIP	4pF	0.25pF	50V
C0913	1-162-909-11	CERAMIC CHIP	4pF	0.25pF	50V
C0914	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1001	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1003	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1004	1-126-607-11	ELECT CHIP	47µF	20%	4V
C1007	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1008	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1009	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1010	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1100	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1101	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1102	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1103	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1104	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1105	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1106	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1107	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1108	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1109	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1110	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1111	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C1112	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
C1113	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1114	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1115	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1116	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1117	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1118	1-124-779-00	ELECT CHIP	10µF	20%	16V
⚠ C1201	1-113-915-11	CERAMIC	0.001µF	20%	250V
⚠ C1202	1-113-915-11	CERAMIC	0.001µF	20%	250V
C1203	1-107-824-41	CERAMIC	220pF	5%	1KV
C1204	1-137-723-21	CERAMIC CHIP	0.047µF	10%	250V
C1205	1-135-965-21	CERAMIC CHIP	1000pF	10%	250V
C1206	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1207	1-135-965-21	CERAMIC CHIP	1000pF	10%	250V
C1208	1-104-913-11	TANTAL. CHIP	10µF	20%	16V
C1209	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C1210	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1211	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1212	1-135-788-21	CERAMIC CHIP	0.033µF	10%	250V
C1213	1-135-788-21	CERAMIC CHIP	0.033µF	10%	250V
C1214	1-109-842-11	CERAMIC	10pF	5%	2KV
C1215	1-109-842-11	CERAMIC	10pF	5%	2KV
C1216	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1217	1-162-909-11	CERAMIC CHIP	4pF	0.25pF	50V
C1218	1-104-913-11	TANTAL. CHIP	10µF	20%	16V
C1219	1-135-965-21	CERAMIC CHIP	1000pF	10%	250V
C1220	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C1221	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C1222	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1223	1-137-723-21	CERAMIC CHIP	0.047µF	10%	250V
C1225	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C1226	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C1300	1-126-607-11	ELECT CHIP	47µF	20%	4V
C1301	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1302	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1303	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1304	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1305	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1306	1-126-607-11	ELECT CHIP	47µF	20%	4V
C1307	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1308	1-162-912-11	CERAMIC CHIP	7pF	0.50pF	50V
C1309	1-162-912-11	CERAMIC CHIP	7pF	0.50pF	50V
C1310	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1311	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1312	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1313	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1314	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1315	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1316	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1317	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1318	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1319	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1320	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1321	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1322	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1323	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1324	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1400	1-126-193-11	ELECT CHIP	1µF	20%	50V
C1401	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1402	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1403	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C1404	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1405	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C1406	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C1407	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C1408	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C1439	1-164-388-91	CERAMIC CHIP	270pF	5%	50V
C1440	1-164-388-91	CERAMIC CHIP	270pF	5%	50V
C1441	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1442	1-162-919-11	CERAMIC CHIP	22pF	5%	50V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C1443	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C1444	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C1445	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1446	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1500	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C1501	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C1502	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C1503	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1504	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1505	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C1506	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C1509	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1510	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1513	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1514	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1521	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C1522	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C1525	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1526	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1527	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1528	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1529	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1531	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1532	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C1533	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1534	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C1535	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1536	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1537	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C1538	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C1539	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C1540	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C1617	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1618	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1619	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C1620	1-162-962-11	CERAMIC CHIP	470pF	10%	50V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION
	CN0001	1-816-466-21	PIN, CONNECTOR 10P
	CN0002	1-816-296-21	PIN, CONNECTOR (PC BOARD) 9P
	CN0900	1-794-509-11	PIN, CONNECTOR (PC BOARD) (3P)
	CN0903	1-540-151-21	SOCKET, IC
	CN1001	1-816-498-21	CONNECTOR, FFC/FPC 24P
*	CN1500	1-784-011-11	CONNECTOR, USB (AX2)

MA-422

DIODE

REF. NO.	PART NO.	DESCRIPTION	VALUES
D0001	8-719-078-04	DIODE	EC31QS03L-TE12L
D0002	8-719-988-61	DIODE	1SS355TE-17
D0139	8-719-404-50	DIODE	MA111-TX
D0140	8-719-404-50	DIODE	MA111-TX
D0200	8-719-056-17	DIODE	RD6.2MW-T1B
D0201	8-719-056-17	DIODE	RD6.2MW-T1B
D0203	8-719-056-17	DIODE	RD6.2MW-T1B
D0303	8-719-404-50	DIODE	MA111-TX
D0304	8-719-404-50	DIODE	MA111-TX
D0311	8-719-988-61	DIODE	1SS355TE-17
D0312	8-719-988-61	DIODE	1SS355TE-17
D0313	8-719-018-12	DIODE	MA8330
D0900	8-719-988-61	DIODE	1SS355TE-17
D1002	8-719-060-99	DIODE	SML-210MT-T86
D1200	8-719-050-65	DIODE	S1ZB60
D1201	8-719-056-48	DIODE	1SS388(TPL3)
D1202	8-719-401-53	DIODE	MA3056H-TX
D1500	8-719-421-59	DIODE	MA3130WA-TX
D1501	8-719-421-59	DIODE	MA3130WA-TX
D1502	8-719-421-59	DIODE	MA3130WA-TX
D1503	8-719-421-59	DIODE	MA3130WA-TX
D1504	8-719-421-59	DIODE	MA3130WA-TX
D1505	8-719-421-59	DIODE	MA3130WA-TX

FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB0306	1-469-324-21	FERRITE	0µH
FB0308	1-414-228-11	FERRITE	0µH
FB0309	1-414-228-11	FERRITE	0µH
FB0310	1-414-228-11	FERRITE	0µH
FB0311	1-414-228-11	FERRITE	0µH
FB0312	1-469-324-21	FERRITE	0µH
FB0313	1-469-324-21	FERRITE	0µH
FB0314	1-414-228-11	FERRITE	0µH
FB0315	1-414-228-11	FERRITE	0µH
FB0600	1-469-836-21	FERRITE	0µH
FB1001	1-414-228-11	FERRITE	0µH
FB1002	1-414-228-11	FERRITE	0µH
FB1003	1-469-324-21	FERRITE	0µH
FB1004	1-469-324-21	FERRITE	0µH
FB1005	1-469-324-21	FERRITE	0µH
FB1500	1-414-553-11	FERRITE	0µH
FB1501	1-500-283-11	FERRITE	0µH
FB1502	1-500-283-11	FERRITE	0µH
FB1503	1-414-553-11	FERRITE	0µH
FB1504	1-414-553-11	FERRITE	0µH
FB1505	1-469-324-21	FERRITE	0µH
FB1506	1-469-324-21	FERRITE	0µH
FB1507	1-469-324-21	FERRITE	0µH
FB1508	1-469-324-21	FERRITE	0µH
FB1509	1-414-228-11	FERRITE	0µH
FB1510	1-414-228-11	FERRITE	0µH

FILTER

REF. NO.	PART NO.	DESCRIPTION	VALUES
FL0001	1-234-177-21	FERRITE	0µH
FL0002	1-234-128-21	FERRITE	0µH
FL0003	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL0004	1-234-123-21	FERRITE	0µH
FL0005	1-234-177-21	FERRITE	0µH
FL0100	1-234-177-21	FERRITE	0µH
FL0200	1-234-177-21	FERRITE	0µH
FL0201	1-234-177-21	FERRITE	0µH
FL0300	1-234-177-21	FERRITE	0µH
FL0400	1-234-177-21	FERRITE	0µH
FL0401	1-234-177-21	FERRITE	0µH
FL0402	1-234-177-21	FERRITE	0µH
FL0500	1-234-177-21	FERRITE	0µH
FL0501	1-234-177-21	FERRITE	0µH
FL0600	1-234-177-21	FERRITE	0µH
FL0601	1-234-177-21	FERRITE	0µH
FL0602	1-234-177-21	FERRITE	0µH
FL0700	1-234-177-21	FERRITE	0µH
FL0701	1-234-177-21	FERRITE	0µH
FL0702	1-234-177-21	FERRITE	0µH
FL0703	1-234-177-21	FERRITE	0µH
FL0800	1-234-177-21	FERRITE	0µH
FL0801	1-234-177-21	FERRITE	0µH
FL0900	1-234-177-21	FERRITE	0µH
FL0901	1-234-177-21	FERRITE	0µH
FL1100	1-234-177-21	FERRITE	0µH
FL1300	1-234-177-21	FERRITE	0µH
FL1301	1-234-177-21	FERRITE	0µH

IC

REF. NO.	PART NO.	DESCRIPTION	VALUES
IC0002	6-702-619-01	IC	NJM2370U08-TE1
IC0003	8-759-157-17	IC	PQ05SZ1U

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES
IC0004	8-759-679-48	IC	PQ3DZ13U
IC0005	6-702-302-01	IC	TK11133CSCL-G
IC0006	6-702-381-01	IC	SI-3011ZD-TL
IC0007	8-749-015-18	IC	PQ07VZ012ZP
IC0101	6-702-198-01	IC	MAX708TCSA-TG068
IC0102	8-759-585-51	IC	SN74AHC1G32DBVR
IC0103	6-702-177-01	IC	MK2745-26STR
IC0104	6-702-187-01	IC	ICS502MT
IC0105	8-759-680-53	IC	ICS9112AM-16-ER
IC0106	6-702-187-01	IC	ICS502MT
IC0107	8-759-523-97	IC	TC74VHC123AFT(EL)
IC0204	8-759-676-15	IC	SAA7114H
IC0301	6-702-188-01	IC	MSP4448G-FH-A2
IC0303	8-759-357-68	IC	NJM2115M-TE2
IC0304	8-759-649-28	IC	SN74AHC1G04DBVR
IC0305	8-759-669-44	IC	SN74LVC74APWR-12
IC0400	6-702-192-01	IC	BCM7040KQL
IC0401	6-703-430-01	IC	MT48LC2M32B2TG-6-Y94W
IC0500	6-702-189-01	IC	UPD30541GD-200-WML
IC0700	8-759-589-36	IC	MB81F641642C-103LFN-B
IC0701	8-759-589-36	IC	MB81F641642C-103LFN-B
IC0702	8-759-589-36	IC	MB81F641642C-103LFN-B
IC0703	8-759-589-36	IC	MB81F641642C-103LFN-B
IC0800	6-702-178-01	IC	UPD65948GD-131-LML
IC0900	8-759-649-28	IC	SN74AHC1G04DBVR
IC0901	8-759-585-51	IC	SN74AHC1G32DBVR
IC0902	8-759-585-51	IC	SN74AHC1G32DBVR
* IC0903	8-759-684-98	IC	SST39VF040-70-4C-NH
IC0904	6-702-186-01	IC	M41T56M6TR
IC0905	6-702-197-01	IC	TC74A5-3.3VCT
IC1001	8-759-484-69	IC	MAX3221CAE-TE2
IC1002	6-802-579-01	IC	AT90SC6464C
IC1101	8-749-019-23	IC	CX88168-11
IC1200	8-749-019-24	IC	20463-11
IC1300	6-702-187-01	IC	ICS502MT
IC1301	6-702-024-01	IC	MIC2026-2BM-T&R
IC1302	6-702-193-01	IC	SII0670BCM100
IC1400	8-759-662-95	IC	BA7665FS-E2
IC1600	6-801-554-01	IC	AT90S2313-4SC-SL766

JACK

REF. NO.	PART NO.	DESCRIPTION	VALUES
J1200	1-766-250-11	JACK, MODULAR (2C) 6P	
* J1500	1-817-090-11	JACK, PIN	
* J1501	1-817-185-11	JACK BLOCK, PIN 8P	

REF. NO.	PART NO.	DESCRIPTION	VALUES
J1502	1-565-790-32	JACK, SMALL TYPE 2P	
JS0001	1-216-864-11	SHORT CHIP	
JS0002	1-216-864-11	SHORT CHIP	
JS0003	1-216-864-11	SHORT CHIP	
JS0101	1-216-864-11	SHORT CHIP	
JS0200	1-216-864-11	SHORT CHIP	
JS0300	1-216-864-11	SHORT CHIP	
JS0301	1-216-864-11	SHORT CHIP	
JS0302	1-216-864-11	SHORT CHIP	
JS0303	1-216-864-11	SHORT CHIP	
JS0304	1-216-864-11	SHORT CHIP	
JS0305	1-216-864-11	SHORT CHIP	
JS0306	1-216-864-11	SHORT CHIP	
JS0307	1-216-864-11	SHORT CHIP	
JS0308	1-216-864-11	SHORT CHIP	
JS0309	1-216-864-11	SHORT CHIP	
JS0310	1-216-864-11	SHORT CHIP	
JS0311	1-216-864-11	SHORT CHIP	
JS0312	1-216-864-11	SHORT CHIP	
JS0313	1-216-864-11	SHORT CHIP	
JS0314	1-216-864-11	SHORT CHIP	
JS0315	1-216-864-11	SHORT CHIP	
JS1007	1-216-864-11	SHORT CHIP	
JS1008	1-216-864-11	SHORT CHIP	
JS1009	1-216-864-11	SHORT CHIP	
JS1010	1-216-864-11	SHORT CHIP	
JS1011	1-216-864-11	SHORT CHIP	
JS1012	1-216-864-11	SHORT CHIP	
JS1013	1-216-864-11	SHORT CHIP	
JS1014	1-216-864-11	SHORT CHIP	
JS1015	1-216-864-11	SHORT CHIP	
JS1016	1-216-864-11	SHORT CHIP	
JS1018	1-216-864-11	SHORT CHIP	
JS1019	1-216-864-11	SHORT CHIP	

COIL

REF. NO.	PART NO.	DESCRIPTION	VALUES
L0202	1-412-951-11	INDUCTOR	10μH
L0305	1-414-398-11	INDUCTOR	10μH
L0400	1-414-398-11	INDUCTOR	10μH
L0401	1-414-398-11	INDUCTOR	10μH
L0500	1-414-398-11	INDUCTOR	10μH
L0501	1-414-398-11	INDUCTOR	10μH
L0600	1-414-398-11	INDUCTOR	10μH

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
L0601	1-414-398-11	INDUCTOR	10μH		
L1416	1-412-943-11	INDUCTOR	2.2μH		
L1417	1-412-947-11	INDUCTOR	4.7μH		
L1418	1-414-398-11	INDUCTOR	10μH		
LF1200	1-239-581-21	FERRITE	0μH		

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
Q0139	8-729-010-25	TRANSISTOR	MSD601-RT1
Q0313	8-729-425-18	TRANSISTOR	XN4504
Q0314	8-729-010-05	TRANSISTOR	MSB709-RT1
Q0315	8-729-010-25	TRANSISTOR	MSD601-RT1
Q0316	8-729-010-05	TRANSISTOR	MSB709-RT1
Q0317	8-729-010-25	TRANSISTOR	MSD601-RT1
Q0318	8-729-010-25	TRANSISTOR	MSD601-RT1
Q0319	8-729-200-13	TRANSISTOR	2SC2712-Y
Q0900	8-729-030-20	TRANSISTOR	2SC4097-T106PQR
Q0901	8-729-030-20	TRANSISTOR	2SC4097-T106PQR
Q1000	8-729-010-25	TRANSISTOR	MSD601-RT1
Q1001	8-729-010-05	TRANSISTOR	MSB709-RT1
Q1200	8-729-055-71	TRANSISTOR	MPSA44
Q1201	8-729-051-96	TRANSISTOR	CEN1000TR
Q1202	8-729-051-95	TRANSISTOR	CEN1014TR
Q1415	8-729-026-52	TRANSISTOR	2SA1576A-T106-R
Q1416	8-729-026-52	TRANSISTOR	2SA1576A-T106-R

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R0001	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0002	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0003	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0004	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0005	1-218-866-11	METAL CHIP	6.2K	0.50%	1/10W
R0009	1-216-296-11	SHORT CHIP			
R0010	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R0011	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0012	1-216-817-11	METAL CHIP	470	5%	1/10W
R0013	1-216-811-11	METAL CHIP	150	5%	1/10W
R0014	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R0015	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R0102	1-216-864-11	SHORT CHIP			
R0103	1-218-272-11	METAL CHIP	5.1K	5%	1/10W
R0105	1-216-864-11	SHORT CHIP			
R0112	1-216-803-11	METAL CHIP	33	5%	1/10W
R0113	1-216-803-11	METAL CHIP	33	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R0114	1-216-803-11	METAL CHIP	33	5%	1/10W
R0115	1-216-803-11	METAL CHIP	33	5%	1/10W
R0116	1-216-803-11	METAL CHIP	33	5%	1/10W
R0117	1-216-803-11	METAL CHIP	33	5%	1/10W
R0118	1-216-803-11	METAL CHIP	33	5%	1/10W
R0119	1-216-803-11	METAL CHIP	33	5%	1/10W
R0120	1-216-803-11	METAL CHIP	33	5%	1/10W
R0121	1-216-803-11	METAL CHIP	33	5%	1/10W
R0122	1-216-803-11	METAL CHIP	33	5%	1/10W
R0123	1-216-803-11	METAL CHIP	33	5%	1/10W
R0124	1-216-803-11	METAL CHIP	33	5%	1/10W
R0125	1-216-803-11	METAL CHIP	33	5%	1/10W
R0126	1-216-803-11	METAL CHIP	33	5%	1/10W
R0139	1-216-864-11	SHORT CHIP			
R0140	1-216-809-11	METAL CHIP	100	5%	1/10W
R0141	1-216-864-11	SHORT CHIP			
R0142	1-216-864-11	SHORT CHIP			
R0145	1-216-847-11	METAL CHIP	150K	5%	1/10W
R0146	1-216-817-11	METAL CHIP	470	5%	1/10W
R0147	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0148	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0220	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0221	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0224	1-216-803-11	METAL CHIP	33	5%	1/10W
R0225	1-216-803-11	METAL CHIP	33	5%	1/10W
R0226	1-216-803-11	METAL CHIP	33	5%	1/10W
R0227	1-216-803-11	METAL CHIP	33	5%	1/10W
R0228	1-216-803-11	METAL CHIP	33	5%	1/10W
R0229	1-216-803-11	METAL CHIP	33	5%	1/10W
R0230	1-216-803-11	METAL CHIP	33	5%	1/10W
R0231	1-216-803-11	METAL CHIP	33	5%	1/10W
R0232	1-216-803-11	METAL CHIP	33	5%	1/10W
R0233	1-216-803-11	METAL CHIP	33	5%	1/10W
R0234	1-216-803-11	METAL CHIP	33	5%	1/10W
R0235	1-216-800-11	METAL CHIP	18	5%	1/10W
R0236	1-216-800-11	METAL CHIP	18	5%	1/10W
R0238	1-216-800-11	METAL CHIP	18	5%	1/10W
R0239	1-216-806-11	METAL CHIP	56	5%	1/10W
R0240	1-216-806-11	METAL CHIP	56	5%	1/10W
R0242	1-216-806-11	METAL CHIP	56	5%	1/10W
R0243	1-216-815-11	METAL CHIP	330	5%	1/10W
R0244	1-216-821-11	METAL CHIP	1K	5%	1/10W

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R0300	1-216-803-11	METAL CHIP	33	5%	1/10W
R0301	1-216-803-11	METAL CHIP	33	5%	1/10W
R0302	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0303	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0304	1-216-803-11	METAL CHIP	33	5%	1/10W
R0305	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0308	1-216-864-11	SHORT CHIP			
R0309	1-216-864-11	SHORT CHIP			
R0310	1-216-049-11	RES-CHIP	1K	5%	1/10W
R0311	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R0312	1-216-085-91	RES-CHIP	33K	5%	1/10W
R0334	1-216-864-11	SHORT CHIP			
R0341	1-216-864-11	SHORT CHIP			
R0342	1-216-864-11	SHORT CHIP			
R0347	1-216-842-11	METAL CHIP	56K	5%	1/10W
R0348	1-216-842-11	METAL CHIP	56K	5%	1/10W
R0349	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0350	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0356	1-216-809-11	METAL CHIP	100	5%	1/10W
R0359	1-216-864-11	SHORT CHIP			
R0360	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R0361	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R0369	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0370	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0371	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0372	1-216-864-11	SHORT CHIP			
R0373	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0374	1-216-846-11	METAL CHIP	120K	5%	1/10W
R0375	1-216-846-11	METAL CHIP	120K	5%	1/10W
R0376	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0377	1-216-846-11	METAL CHIP	120K	5%	1/10W
R0378	1-216-846-11	METAL CHIP	120K	5%	1/10W
R0379	1-216-817-11	METAL CHIP	470	5%	1/10W
R0380	1-216-817-11	METAL CHIP	470	5%	1/10W
R0381	1-216-864-11	SHORT CHIP			
R0382	1-216-864-11	SHORT CHIP			
R0383	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0384	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0385	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0386	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0387	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0389	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0390	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R0391	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0392	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0393	1-216-809-11	METAL CHIP	100	5%	1/10W
R0394	1-216-814-11	METAL CHIP	270	5%	1/10W
R0395	1-216-864-11	SHORT CHIP			
R0396	1-216-803-11	METAL CHIP	33	5%	1/10W
R0397	1-216-864-11	SHORT CHIP			
R0398	1-216-864-11	SHORT CHIP			
R0399	1-216-864-11	SHORT CHIP			
R0402	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0403	1-216-864-11	SHORT CHIP			
R0404	1-216-864-11	SHORT CHIP			
R0405	1-216-864-11	SHORT CHIP			
R0406	1-216-864-11	SHORT CHIP			
R0407	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0408	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0500	1-216-797-11	METAL CHIP	10	5%	1/10W
R0501	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0502	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0503	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0504	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0505	1-216-864-11	SHORT CHIP			
R0508	1-216-864-11	SHORT CHIP			
R0509	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0510	1-216-803-11	METAL CHIP	33	5%	1/10W
R0511	1-216-809-11	METAL CHIP	100	5%	1/10W
R0512	1-216-809-11	METAL CHIP	100	5%	1/10W
R0513	1-216-864-11	SHORT CHIP			
R0601	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0602	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0605	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0606	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0607	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0608	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0609	1-216-864-11	SHORT CHIP			
R0610	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0611	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0612	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0613	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0614	1-216-806-11	METAL CHIP	56	5%	1/10W
R0615	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0616	1-216-864-11	SHORT CHIP			

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R0617	1-216-803-11	METAL CHIP	33	5%	1/10W
R0618	1-216-864-11	SHORT CHIP			
R0619	1-216-803-11	METAL CHIP	33	5%	1/10W
R0624	1-216-809-11	METAL CHIP	100	5%	1/10W
R0625	1-216-803-11	METAL CHIP	33	5%	1/10W
R0626	1-216-864-11	SHORT CHIP			
R0627	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0629	1-216-803-11	METAL CHIP	33	5%	1/10W
R0631	1-216-803-11	METAL CHIP	33	5%	1/10W
R0632	1-216-803-11	METAL CHIP	33	5%	1/10W
R0633	1-216-803-11	METAL CHIP	33	5%	1/10W
R0634	1-216-809-11	METAL CHIP	100	5%	1/10W
R0635	1-216-809-11	METAL CHIP	100	5%	1/10W
R0636	1-216-864-11	SHORT CHIP			
R0637	1-216-864-11	SHORT CHIP			
R0638	1-216-864-11	SHORT CHIP			
R0639	1-216-864-11	SHORT CHIP			
R0640	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0641	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0642	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0643	1-216-864-11	SHORT CHIP			
R0646	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0648	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0650	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0651	1-216-864-11	SHORT CHIP			
R0652	1-216-864-11	SHORT CHIP			
R0653	1-216-864-11	SHORT CHIP			
R0654	1-216-803-11	METAL CHIP	33	5%	1/10W
R0655	1-216-803-11	METAL CHIP	33	5%	1/10W
R0656	1-216-803-11	METAL CHIP	33	5%	1/10W
R0657	1-216-803-11	METAL CHIP	33	5%	1/10W
R0658	1-216-803-11	METAL CHIP	33	5%	1/10W
R0659	1-216-864-11	SHORT CHIP			
R0660	1-216-864-11	SHORT CHIP			
R0661	1-216-803-11	METAL CHIP	33	5%	1/10W
R0662	1-216-803-11	METAL CHIP	33	5%	1/10W
R0663	1-216-803-11	METAL CHIP	33	5%	1/10W
R0664	1-216-803-11	METAL CHIP	33	5%	1/10W
R0700	1-216-864-11	SHORT CHIP			
R0701	1-216-864-11	SHORT CHIP			
R0702	1-216-864-11	SHORT CHIP			
R0703	1-216-864-11	SHORT CHIP			
R0801	1-216-864-11	SHORT CHIP			

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R0802	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0803	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0804	1-216-864-11	SHORT CHIP			
R0805	1-216-864-11	SHORT CHIP			
R0806	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0807	1-216-864-11	SHORT CHIP			
R0808	1-216-864-11	SHORT CHIP			
R0809	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0810	1-216-864-11	SHORT CHIP			
R0811	1-216-864-11	SHORT CHIP			
R0812	1-216-864-11	SHORT CHIP			
R0813	1-216-864-11	SHORT CHIP			
R0814	1-216-864-11	SHORT CHIP			
R0815	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0900	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0901	1-218-864-11	METAL CHIP	5.1K	0.50%	1/10W
R0902	1-216-135-00	RES-CHIP	2.4	5%	1/8W
R0903	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0904	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1000	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1001	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1002	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1011	1-216-818-11	METAL CHIP	560	5%	1/10W
R1014	1-216-864-11	SHORT CHIP			
R1016	1-216-222-00	RES-CHIP	10K	5%	1/8W
R1017	1-216-186-00	RES-CHIP	330	5%	1/8W
R1018	1-216-150-91	RES-CHIP	10	5%	1/8W
R1019	1-216-150-91	RES-CHIP	10	5%	1/8W
R1020	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R1021	1-216-222-00	RES-CHIP	10K	5%	1/8W
R1022	1-218-843-11	METAL CHIP	680	0.50%	1/10W
R1023	1-216-864-11	SHORT CHIP			
R1024	1-216-864-11	SHORT CHIP			
R1025	1-216-809-11	METAL CHIP	100	5%	1/10W
R1026	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1028	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1100	1-216-864-11	SHORT CHIP			
R1101	1-216-864-11	SHORT CHIP			
R1102	1-216-864-11	SHORT CHIP			
R1103	1-216-864-11	SHORT CHIP			
R1104	1-216-864-11	SHORT CHIP			
R1105	1-216-864-11	SHORT CHIP			

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1106	1-216-864-11	SHORT CHIP			
R1107	1-216-864-11	SHORT CHIP			
R1108	1-216-864-11	SHORT CHIP			
R1109	1-216-864-11	SHORT CHIP			
R1110	1-216-864-11	SHORT CHIP			
R1111	1-216-864-11	SHORT CHIP			
R1112	1-216-864-11	SHORT CHIP			
R1113	1-216-864-11	SHORT CHIP			
R1114	1-216-864-11	SHORT CHIP			
R1115	1-216-296-11	SHORT CHIP			
R1116	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1117	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1118	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1119	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1121	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1122	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1123	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1126	1-216-864-11	SHORT CHIP			
R1127	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1129	1-216-296-11	SHORT CHIP			
R1130	1-216-809-11	METAL CHIP	100	5%	1/10W
R1200	1-243-465-21	METAL CHIP	6.8M	5%	1/4W
R1201	1-243-464-21	METAL CHIP	475K	0.50%	1/4W
R1202	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R1203	1-218-917-11	METAL CHIP	820K	0.50%	1/10W
R1204	1-216-850-11	METAL CHIP	270K	5%	1/10W
R1205	1-243-458-91	METAL CHIP	576K	0.50%	1/10W
R1206	1-243-462-21	METAL CHIP	1M	5%	1/4W
R1207	1-243-462-21	METAL CHIP	1M	5%	1/4W
R1208	1-218-907-11	METAL CHIP	330K	0.50%	1/10W
R1209	1-216-864-11	SHORT CHIP			
R1210	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1211	1-216-296-11	SHORT CHIP			
R1212	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1213	1-243-459-91	METAL CHIP	143K	0.50%	1/10W
R1214	1-216-296-11	SHORT CHIP			
R1215	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1216	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1217	1-243-460-21	METAL CHIP	348K	0.50%	1/4W
R1218	1-218-883-11	METAL CHIP	33K	0.50%	1/10W
R1219	1-216-864-11	SHORT CHIP			
R1220	1-216-797-11	METAL CHIP	10	5%	1/10W
R1221	1-216-029-00	RES-CHIP	150	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1222	1-216-296-11	SHORT CHIP			
R1223	1-216-809-11	METAL CHIP	100	5%	1/10W
R1224	1-218-331-11	METAL CHIP	51K	5%	1/10W
R1225	1-216-295-91	SHORT CHIP			
R1226	1-216-295-91	SHORT CHIP			
R1227	1-243-461-21	METAL CHIP	24	0.50%	1/2W
R1300	1-216-864-11	SHORT CHIP			
R1301	1-216-864-11	SHORT CHIP			
R1302	1-216-864-11	SHORT CHIP			
R1303	1-216-864-11	SHORT CHIP			
R1304	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1305	1-218-843-11	METAL CHIP	680	0.50%	1/10W
R1306	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1307	1-218-843-11	METAL CHIP	680	0.50%	1/10W
R1308	1-216-803-11	METAL CHIP	33	5%	1/10W
R1309	1-216-803-11	METAL CHIP	33	5%	1/10W
R1310	1-216-803-11	METAL CHIP	33	5%	1/10W
R1311	1-216-803-11	METAL CHIP	33	5%	1/10W
R1312	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R1313	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R1314	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R1315	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R1316	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1317	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1318	1-216-864-11	SHORT CHIP			
R1319	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1320	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1321	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1322	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1323	1-216-864-11	SHORT CHIP			
R1324	1-216-864-11	SHORT CHIP			
R1402	1-216-864-11	SHORT CHIP			
R1404	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R1405	1-218-851-11	METAL CHIP	1.5K	0.50%	1/10W
R1406	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R1407	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R1408	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R1409	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R1440	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1441	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1442	1-216-864-11	SHORT CHIP			
R1443	1-216-864-11	SHORT CHIP			

MA-422

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1444	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1501	1-211-990-11	METAL CHIP	75	0.50%	1/10W
R1502	1-216-801-11	METAL CHIP	22	5%	1/10W
R1503	1-216-801-11	METAL CHIP	22	5%	1/10W
R1504	1-211-990-11	METAL CHIP	75	0.50%	1/10W
R1505	1-211-990-11	METAL CHIP	75	0.50%	1/10W
R1506	1-211-990-11	METAL CHIP	75	0.50%	1/10W
R1507	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1508	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1509	1-216-864-11	SHORT CHIP			
R1510	1-211-990-11	METAL CHIP	75	0.50%	1/10W
R1511	1-211-990-11	METAL CHIP	75	0.50%	1/10W
R1512	1-216-864-11	SHORT CHIP			
R1516	1-216-817-11	METAL CHIP	470	5%	1/10W
R1517	1-216-817-11	METAL CHIP	470	5%	1/10W
R1518	1-216-864-11	SHORT CHIP			
R1519	1-216-864-11	SHORT CHIP			
R1520	1-216-817-11	METAL CHIP	470	5%	1/10W
R1521	1-216-817-11	METAL CHIP	470	5%	1/10W
R1524	1-216-864-11	SHORT CHIP			
R1525	1-216-864-11	SHORT CHIP			
R1526	1-216-864-11	SHORT CHIP			
R1527	1-216-864-11	SHORT CHIP			
R1528	1-216-864-11	SHORT CHIP			
R1530	1-216-864-11	SHORT CHIP			
R1531	1-216-864-11	SHORT CHIP			
R1532	1-216-864-11	SHORT CHIP			
R1533	1-216-864-11	SHORT CHIP			
R1534	1-216-864-11	SHORT CHIP			
R1535	1-216-864-11	SHORT CHIP			
R1536	1-216-864-11	SHORT CHIP			
R1537	1-216-864-11	SHORT CHIP			
R1538	1-216-864-11	SHORT CHIP			
R1539	1-216-864-11	SHORT CHIP			
R1540	1-216-864-11	SHORT CHIP			
R1541	1-216-864-11	SHORT CHIP			
R1542	1-216-864-11	SHORT CHIP			
R1543	1-216-864-11	SHORT CHIP			
R1603	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1604	1-216-864-11	SHORT CHIP			
R1605	1-216-809-11	METAL CHIP	100	5%	1/10W
R1606	1-216-809-11	METAL CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES
		RESISTOR BRIDGE	
RB0400	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0401	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0500	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0501	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0502	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0503	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0504	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0600	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0601	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0602	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0603	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0604	1-234-377-21	RES, NETWORK 4.7KX4	(1005)
RB0605	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB0606	1-234-376-21	RES, NETWORK 2.2KX4	(1005)
RB0607	1-234-376-21	RES, NETWORK 2.2KX4	(1005)
RB0608	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0609	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0610	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0611	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0612	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0613	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0614	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0615	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0616	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0617	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0618	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0619	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0620	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0621	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0622	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0623	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0624	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0625	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0626	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0800	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB0802	1-242-963-21	RES, NETWORK 33X4	(1005)
RB0803	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB0804	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB0900	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB0901	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB1000	1-242-963-21	RES, NETWORK 33X4	(1005)
RB1001	1-242-963-21	RES, NETWORK 33X4	(1005)
RB1002	1-242-963-21	RES, NETWORK 33X4	(1005)

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

MA-422
PS-449

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	RB1003	1-242-963-21	RES, NETWORK 33X4	(1005)
	RB1004	1-242-963-21	RES, NETWORK 33X4	(1005)
	RB1005	1-242-963-21	RES, NETWORK 33X4	(1005)
	RB1006	1-242-963-21	RES, NETWORK 33X4	(1005)
	RB1007	1-242-963-21	RES, NETWORK 33X4	(1005)

SWITCH

	REF. NO.	PART NO.	DESCRIPTION
	S0300	1-571-588-11	SWITCH, SLIDE
	S1600	1-572-474-11	SWITCH, TACTILE

TRANSFORMER

	REF. NO.	PART NO.	DESCRIPTION
⚠	T1200	1-435-991-21	TRANSFORMER, MODEM

TUNER

	REF. NO.	PART NO.	DESCRIPTION
	TU0300	1-693-597-11	TUNER

VARISTOR

	REF. NO.	PART NO.	DESCRIPTION
⚠	VDR001	1-251-628-11	ABSORBER, SURGE
⚠	VDR002	1-417-341-11	ABSORBER, SURGE
⚠	VDR003	1-417-341-11	ABSORBER, SURGE

CRYSTAL

	REF. NO.	PART NO.	DESCRIPTION
	X0101	1-795-613-11	VIBRATOR, CRYSTAL (27MHZ)
	X0200	1-767-399-31	VIBRATOR, CRYSTAL
	X0300	1-795-612-11	VIBRATOR, CRYSTAL
	X0900	1-760-928-21	VIBRATOR, CRYSTAL
	X1100	1-767-888-21	VIBRATOR, CRYSTAL
	X1300	1-760-337-21	VIBRATOR, CRYSTAL

PS-449

	REF. NO.	PART NO.	DESCRIPTION	VALUES	
*		**A-6787-911-A**	**PS-449 BOARD, COMPLETE**		
*		3-741-933-01	HEAT SINK		
		7-682-547-09	SCREW +B 3X6		
		7-685-646-79	SCREW +BVTP 3X8	TYPE2	IT-3

CAPACITOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
⚠	C101	1-104-705-11	MYLAR	0.1µF	20%	250V
⚠	C102	1-104-705-11	MYLAR	0.1µF	20%	250V
⚠	C103	1-113-900-11	CERAMIC	470pF	10%	250V
⚠	C104	1-113-900-11	CERAMIC	470pF	10%	250V
⚠	C105	1-113-889-11	CERAMIC	0.001µF	20%	250V
⚠	C106	1-125-738-11	ELECT(BLOCK)	270µF	20%	250V
	C107	1-129-928-61	FILM	0.0027µF	5%	630V
	C108	1-107-910-11	ELECT	100µF	20%	50V
	C109	1-164-217-11	CERAMIC CHIP	150pF	5%	50V
	C110	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C113	1-130-475-00	MYLAR	0.0022µF	5%	50V
	C171	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C201	1-128-955-21	ELECT	2200µF	20%	25V
	C202	1-128-954-21	ELECT	1000µF	20%	25V
	C203	1-128-954-21	ELECT	1000µF	20%	25V
	C204	1-107-909-11	ELECT	47µF	20%	50V
	C205	1-128-950-21	ELECT	1000µF	20%	16V
	C206	1-128-950-21	ELECT	1000µF	20%	16V
	C213	1-126-959-11	ELECT	0.47µF	20%	50V
	C214	1-126-959-11	ELECT	0.47µF	20%	50V
	C215	1-107-910-11	ELECT	100µF	20%	50V
	C216	1-107-910-11	ELECT	100µF	20%	50V
	C217	1-107-910-11	ELECT	100µF	20%	50V
	C218	1-107-910-11	ELECT	100µF	20%	50V
	C219	1-107-910-11	ELECT	100µF	20%	50V
	C220	1-107-910-11	ELECT	100µF	20%	50V
	C221	1-107-910-11	ELECT	100µF	20%	50V
	C222	1-107-910-11	ELECT	100µF	20%	50V
	C224	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C225	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C226	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C227	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C228	1-107-909-11	ELECT	47µF	20%	50V
	C229	1-107-910-11	ELECT	100µF	20%	50V
	C230	1-107-910-11	ELECT	100µF	20%	50V
	C231	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION
*	CN101	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P
*	CN201	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P
*	CN202	1-564-712-11	PIN, CONNECTOR (SMALL TYPE)10P
*	CN203	1-560-892-00	PIN, CONNECTOR 4P
*	CN204	1-560-892-00	PIN, CONNECTOR 4P

DIODE

	REF. NO.	PART NO.	DESCRIPTION	VALUES
⚠	D101	8-719-077-76	DIODE	D2SB60A-F04
	D102	8-719-063-70	DIODE	D1NL20U
	D104	8-719-063-70	DIODE	D1NL20U
	D133	8-719-110-31	DIODE	RD12ESB2
	D201	8-719-074-57	DIODE	FCH10A04

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

PS-449
FL-134

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	D202	8-719-061-66	DIODE	FCQ06A06		
	D203	8-719-061-66	DIODE	FCQ06A06		
	D204	8-719-063-70	DIODE	D1NL20U		
	D205	8-719-160-64	DIODE	RD16FB1		
	ET201	1-537-770-21	TERMINAL BOARD, GROUND			
	ET202	1-537-770-21	TERMINAL BOARD, GROUND			
	ET203	1-537-770-21	TERMINAL BOARD, GROUND			
		FUSE				
⚠	F101	1-533-451-11	FUSE	3.15A		125V
		FUSE HOLDER				
	FH101	1-533-223-11	FUSE HOLDER	0A	0V	
	FH102	1-533-223-11	FUSE HOLDER	0A	0V	
		IC				
⚠	IC101	6-702-180-01	IC	MR1520		
⚠	IC201	8-759-667-11	IC	HA17L431P-TZ		
	IC202	8-759-471-81	IC	PQ05RD11		
	IC203	8-759-438-18	IC	PQ12RD08		
	IC204	6-700-898-01	IC	PQ05RD21		
	IC205	6-700-897-01	IC	PQ12RD21		
	IC206	6-700-897-01	IC	PQ12RD21		
		COIL				
	L201	1-406-659-11	INDUCTOR	10µH		
	L202	1-406-659-11	INDUCTOR	10µH		
	L204	1-410-513-11	INDUCTOR	22µH		
⚠	LF101	1-437-861-11	COIL, LINE FILTER			
		PHOTO COUPLER				
⚠	PH101	8-749-924-35	PHOTO COUPLER	ON3171-R		
		IC LINK				
⚠	PS101	1-533-595-31	IC LINK	3.15A	90V	
	PS102	1-576-508-21	IC LINK	0.7A	50V	
⚠	PS103	1-576-288-31	IC LINK	10A	90V	
		RESISTOR				
	R101	1-249-430-11	CARBON	12K	5%	1/4W
	R102	1-218-893-11	METAL CHIP	82K	0.50%	1/10W
	R104	1-218-903-11	METAL CHIP	220K	0.50%	1/10W
	R105	1-249-411-11	CARBON	330	5%	1/4W
	R106	1-216-864-11	SHORT CHIP	0		

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R107	1-218-883-11	METAL CHIP	33K	0.50%	1/10W
⚠	R201	1-218-849-11	METAL CHIP	1.2K	0.50%	1/10W
⚠	R202	1-218-833-11	METAL CHIP	270	0.50%	1/10W
⚠	R203	1-218-845-11	METAL CHIP	820	0.50%	1/10W
	R204	1-249-412-11	CARBON	390	5%	1/4W
	R205	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R206	1-216-816-11	METAL CHIP	390	5%	1/10W
	R207	1-216-813-11	METAL CHIP	220	5%	1/10W
	R208	1-212-966-00	FUSIBLE	22	5%	1/2W
	R209	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R210	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R211	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R212	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R213	1-216-821-11	METAL CHIP	1K	5%	1/10W
		TRANSFORMER				
⚠	T101	1-437-962-11	TRANSFORMER, CONVERTER			
		VARISTOR				
⚠	VDR101	1-801-265-31	VARISTOR	TNR10V271K660		

FL-134

*		**A-6787-914-A**	**FL-134 BOARD, MOUNTED**			
		CAPACITOR				
	C0401	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C0404	1-124-589-11	ELECT	47µF	20%	16V
	C0405	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C0406	1-124-257-00	ELECT	2.2µF	20%	50V
		CONNECTOR				
	CN401	1-816-497-11	CONNECTOR, FFC/FPC 24P			
	CN0402	1-568-670-11	CONNECTOR, BOARD TO BOARD 9P			
		DIODE				
	D0401	8-719-070-83	DIODE	SELU5E20C-TP15		
	D0404	8-719-404-50	DIODE	MA111-TX		
	D0405	8-719-080-13	DIODE	MPY3361XT		
	D0406	8-719-053-87	DIODE	SLR-332VC-T32		
	D0407	8-719-077-08	DIODE	SLR-332DCT32		
	D0408	8-719-404-50	DIODE	MA111-TX		

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	IC				
IC0401	6-703-128-01	IC	TSOP4840SB1		
	CHIP CONDUCTOR				
JR0401	1-216-864-11	SHORT CHIP	0		
JR0402	1-216-864-11	SHORT CHIP	0		
JR0403	1-216-296-11	SHORT CHIP	0		
JR0404	1-216-864-11	SHORT CHIP	0		
JR0405	1-216-296-11	SHORT CHIP	0		
JS0402	1-216-864-11	SHORT CHIP	0		
	TRANSISTOR				
Q0401	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q0404	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q0405	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q0406	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q0407	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q0408	8-729-010-05	TRANSISTOR	MSB709-RT1		
	RESISTOR				
R0401	1-216-158-00	RES-CHIP	22	5%	1/8W
R0404	1-216-818-11	METAL CHIP	560	5%	1/10W
R0405	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0406	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0407	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0408	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R0409	1-216-809-11	METAL CHIP	100	5%	1/10W
R0410	1-216-815-11	METAL CHIP	330	5%	1/10W
R0411	1-216-809-11	METAL CHIP	100	5%	1/10W
R0412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0413	1-216-809-11	METAL CHIP	100	5%	1/10W
R0414	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0415	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0416	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0417	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0418	1-216-222-00	RES-CHIP	10K	5%	1/8W
	SWITCH				
S0401	1-771-349-41	SWITCH, KEYBOARD			
S0402	1-762-875-21	SWITCH, KEYBOARD			
S0403	1-771-349-41	SWITCH, KEYBOARD			

FR-198

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-6787-915-A**	**FR-198 BOARD, MOUNTED**			
	CAPACITOR				
C0302	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	CONNECTOR				
CN0301	1-568-664-11	CONNECTOR, BOARD TO BOARD 9P			
CN0302	1-785-729-21	CONNECTOR, FFC/FPC 7P			
	RESISTOR				
R0301	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0302	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0303	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0304	1-216-837-11	METAL CHIP	22K	5%	1/10W
	SWITCH				
S0301	1-762-875-21	SWITCH, KEYBOARD			
S0302	1-762-875-21	SWITCH, KEYBOARD			
S0303	1-762-875-21	SWITCH, KEYBOARD			
	ACCESSORIES AND PACKAGING				
	1-779-696-22	ADAPTOR, PLUG			
	1-824-651-11	CABLE, DATA			
*	1-769-758-21	CABLE, MODULAR (WITH PLUG)			
	1-823-364-21	CORD, CONNECTION			
	1-824-912-11	CORD, CONNECTION			
	3-078-791-02	CUSHION (BOTTOM)			
	3-078-790-02	CUSHION (TOP)			
	3-078-792-02	INDIVIDUAL CARTON			
	1-782-913-22	IR BLASTER			
	3-078-318-01	QUICK SET-UP GUIDE			
	3-078-316-01	SET-UP GUIDE			
	3-078-317-01	VIEWER'S GUIDE			
	REMOTE COMMANDER				
	1-476-036-12	REMOTE COMMANDER (RMT-V303)			
☛	9-885-030-45	BATTERY COVER (FOR RMT-V303)			

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

9-965-936-03

English
2002LJ74WEB-1
Printed in USA
© 2002.12

SONY®

3-078-316-**01**

Digital Network Recorder

Installation Guide

Please use this manual first

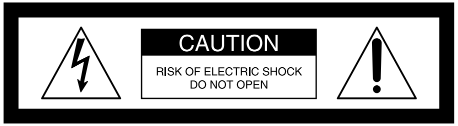
SVR-3000

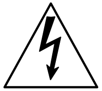
© 2002 by Sony Electronics Inc.

Sony is a registered trade mark of Sony Corporation. TiVo, TV your way, TiVo Central, the TiVo logo, the series 2 logo, Season Pass are trademarks of TiVo Inc. © 2002 Sony Electronics Inc.

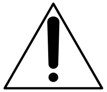
WARNING

To reduce the risk of fire or shock hazard, do not expose the unit to rain or moisture.





This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of significant magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Note to the CATV Installer

This reminder is provided to call the CATV system installer’s attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Attention

Telephone Line Interruption

Periodically, the SVR Recorder dials in to the TiVo Personal TV Service, via your telephone line using a toll free or local number. If you pick up your telephone during the time information is being transferred, you will hear static noise. If you would like to use your telephone while the information is being transferred you can hang up and pick up your telephone again. The SVR Recorder will disconnect and allow you to place your call. You can also interrupt the transfer at any time by temporarily unplugging the phone line from the receiver.

> You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The SVR Recorder is intended for use only within the United States.

Owner’s Record

The model and serial numbers are located on the back of the SVR Recorder. Record these numbers in the space provided below. Refer to these numbers whenever you need to call your sales or service representative regarding this product.

Model Number: ______________________________

Serial Number: ______________________________

Customer Support

For Hardware and Installation

To arrange for the installation of your SVR Recorder, call the dealer from whom you purchased your system.
For general information, or to resolve problems related to the operation of your SVR Recorder, please contact your Sony dealer or visit Sony website at http://www.sony.com/service. If your dealer or installer is unable to answer your questions, call the Sony Direct Response Center at 1-877-585-SONY (7669) or http://www.sel.sony.com/service.

TiVo Service and Activation

To use most of the features of your SVR Recorder, you will need to activate the TiVo Service. You can activate the TiVo Service on the web at http://www.tivo.com/activate, or by calling TiVo Customer Care at 1-877-367-8486). TiVo Customer Care can also help you if you have questions about your channel lineup, program guide data, or on screen messages.

Macrovision Information

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology is granted by Macrovision for home and other limited pay per view uses only. Reverse engineering or disassembly is prohibited.

Note on Recording Programming

Programming may be recorded for home viewing only. All other recording is expressly prohibited. Some programming may not be recorded. An additional recording fee may be applied. Call your program providers for details.

Table of contents

Getting Started

7 Overview
8 Carton Contents
9 Parts, Controls, and Functions
  9 Front Panel
  10 Back Panel
  11 Remote Control
    13 Installing Batteries

Connecting Your Equipment

15 Connection Examples
16 Example 1: Antenna or cable, with a VCR, and splitting the signal
18 Example 2: Antenna or cable, with a VCR
20 Example 3: Antenna or cable, without a VCR
22 Example 4: Satellite set-top box with serial connection, and a VCR, using S-Video cables
24 Example 5: Satellite set-top box with IR input, and a VCR, using S-Video cables
26 Example 6: Satellite or cable box with IR input, and a VCR, using RF cables
28 Example 7: Satellite and antenna or cable, with a VCR
30 Example 8: Satellite and cable with boxes, with a VCR
32 Continuing Your Connection Steps
35 Back Panel Connections Reference
39 General Hints

Setting Up Your System

41 Programming Your Remote Control

Additional Information

45 Troubleshooting
51 Specifications
52 FCC Regulations and Information

About This Installation Guide

This Installation Guide is part of the complete documentation for your SVR Recorder. This Installation Guide describes how to connect the SVR Recorder and activate the TiVo Service. The Start Here poster provides an easy to read summary of this Installation Guide. The TiVo Viewer's Guide provides detailed information about how to use your TiVo Service, and how to use the different features of this product.

The TiVo Viewer's Guide and this Installation Guide contain some sections with the same name, such as the Troubleshooting section, and similar or related information. These sections are in fact different, but do relate to each other. You will find information regarding connections and activating the TiVo Service in this Installation Guide. You will find information about the different features of the SVR Recorder, and using the TiVo Service, in the TiVo Viewer's Guide.

A **Note** provides information that may be necessary to complete the task.

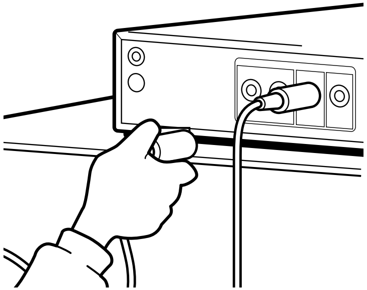
Overview

Your SVR Recorder comes complete with everything you need to enjoy and enhance your television viewing experience.

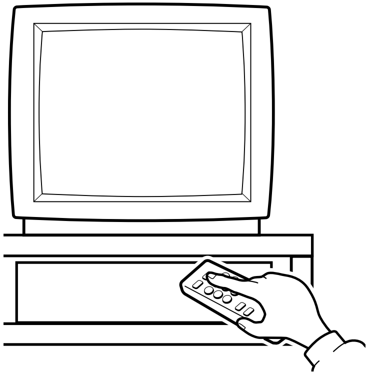
You'll need to have a standard phone line (analog) for the SVR Recorder to use. You do not need to install a new phone jack or phone number for the SVR Recorder to work. However, the SVR Recorder should always be connected to your phone line.

You can find detailed instructions for connecting your SVR Recorder on the Start Here poster and in "Connecting Your Equipment" on page 15.

1 Connect Your SVR Recorder.



2 Complete Guided Setup, and activate your TiVo Service.



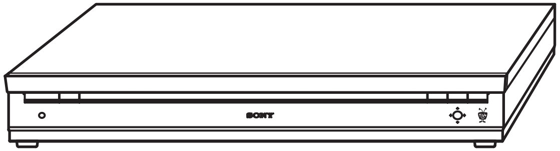
Note

This Installation Guide describes how to connect the SVR Recorder and activate the TiVo Service. The Start Here poster provides an easy to read summary of this Installation Guide. The TiVo Viewer's Guide provides detailed information about how to use your TiVo Service.

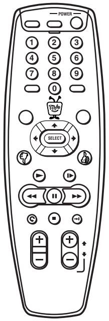
Carton Contents

Check your carton to make sure all of the following items are included. If you are missing any items, contact your Sony dealer.

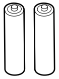
SVR Recorder



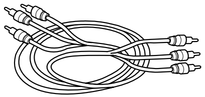
Remote Control



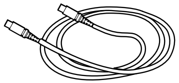
Size AA (R6) batteries



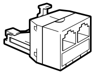
Audio/Video cables



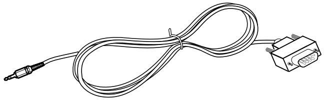
S-Video cable



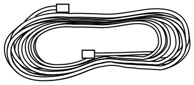
Phone splitter



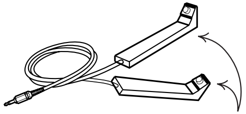
Serial Control cable



Phone cord



IR Control cable

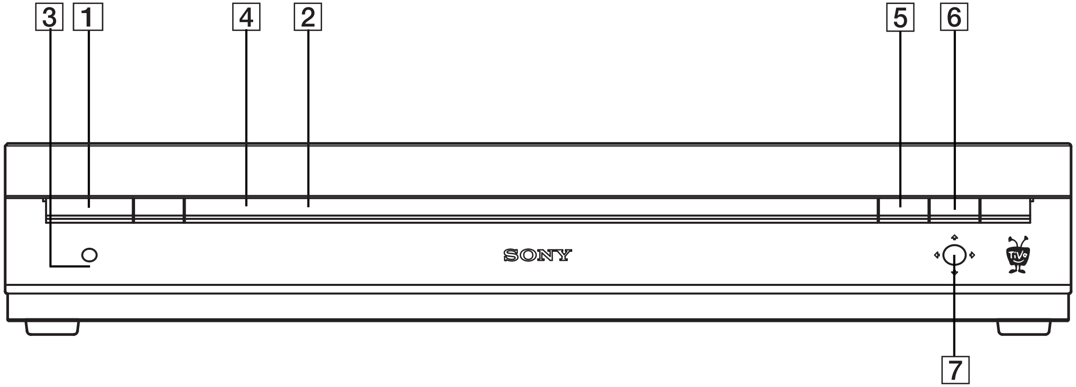


Notes

- **Your SVR Recorder comes with 25 feet of phone cord for you to use to connect to your nearest phone jack. You don’t need a dedicated phone line (your SVR Recorder only needs to share the phone line for five to ten minutes a day), but you may wish to consider installing a jack nearby.**
- **Your SVR Recorder cannot be used with any digital phone system. Doing so will damage your SVR Recorder and void your warranty.**

Parts, Controls, and Functions

Front Panel



1 **Power button/LED**
Green indicates that the SVR Recorder is powered on.

2 **Connecting LED**
Yellow indicates that the SVR recorder is connecting to the telephone line.

3 **Remote Control Signal Reception Window**
Receives control signals from your Remote Control.

4 **Recording LED**
Red indicates that the SVR Recorder is recording a program.
Yellow indicates that the SVR Recorder is currently using the telephone line to call the TiVo Service.
The LED may appear orange if the unit is both recording a program and using the telephone line.

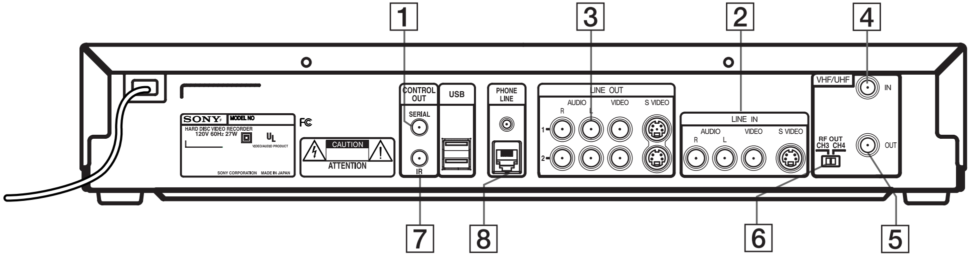
5 **LIVE TV/GUIDE button**
Switches between live TV and program guide.

6 **SELECT buttons**
Select (chooses) the currently highlighted item in a menu.

7 **Navigation arrows**
Moves the highlighted area or cursor left, right, up, or down.

Back Panel

This section provides a brief explanation of the jacks and switch on the back panel and where they are located. You can find detailed information about each jack and switch, and how it is used, on the page number indicated in parentheses.


1
3
2
4
CONTROL OUT
SERIAL
IR
USB
PHONE LINE
LINE OUT
AUDIO
R
L
VIDEO
S VIDEO
1
2
LINE IN
AUDIO
R
L
VIDEO
S VIDEO
VHF/UHF
IN
RF OUT
CH3 CH4
OUT
SONY
MODEL NO
HARD DISC VIDEO RECORDER
120V 60Hz 27W
VIDEO/AUDIO PRODUCT
SONY CORPORATION MADE IN JAPAN
FC
CAUTION
ATTENTION
7
8
6
5

1 Cntrl (control) Out Serial jack
Connect to your satellite set-top box so the SVR Recorder can change channels on your satellite set-top box (see page 35).

2 A/V Input jacks

a) Connect the right (red) and left (white) jacks to the cable box or satellite receiver audio output jacks of the same color (see page 36).
b) Connect the composite video (yellow) jack to the cable box or satellite receiver composite video output (see page 36).
c) Connect the S-Video jack to the cable box or satellite receiver S-Video output jack if available. This connection provides a better picture than the composite video connection (see page 37).

3 A/V Output jacks

a) Connect the right (red) and left (white) jacks to the TV, VCR and/or audio system audio input jacks of the same color (two sets available) (see page 37).
b) Connect the composite video (yellow) jack to the TV and/or VCR composite video input (two jacks available) (see page 37).
c) Connect the S-Video jack to the TV S-Video input jack if available. This connection provides a better picture than the composite video connection (see page 37).

4 RF In
Connect to your off-air antenna or cable service if you do not have a digital satellite receiver or cable box so the SVR Recorder can receive sound and pictures (see page 38).

5 RF Out
Connect to your TV if your TV does not have A/V inputs so you can view sound and pictures (see page 38).

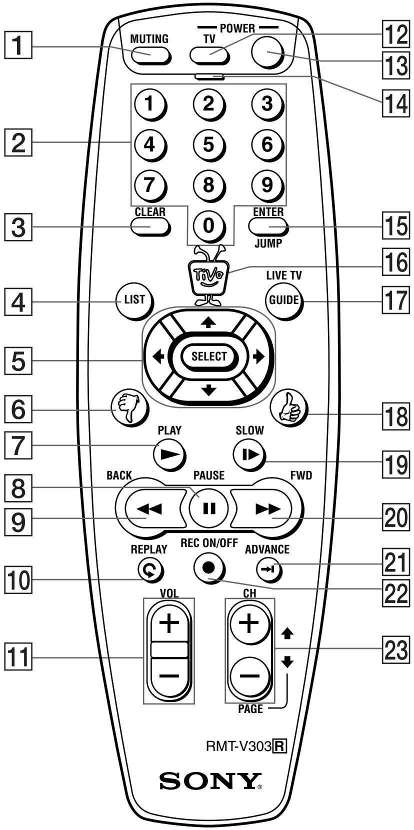
6 Ch 3|4 switch
Set to the channel that does not broadcast a station in your area. Tune your TV to this channel to view sound and pictures from the SVR Recorder if you connected your TV using RF Out (see page 38).

7 Cntrl (control) Out IR jack
Connect to your satellite or cable set-top box so the SVR Recorder can change channels on your satellite or cable set-top box (see page 35).

8 Phone Line jack
Connect to your phone line so the SVR Recorder can receive program and other information from the TiVo Service (see page 35).

Remote Control

Use the Remote Control to complete Guided Setup and activate your TiVo Service. For complete instructions on how to use the Remote Control, refer to the TiVo Viewer's Guide.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
MUTING
POWER
TV
1 2 3
4 5 6
7 8 9
0
CLEAR
ENTER
JUMP
LIVE TV
LIST
GUIDE
SELECT
PLAY
SLOW
BACK
PAUSE
FWD
REPLAY
REC ON/OFF
ADVANCE
VOL
CH
PAGE
RMT-V303R
SONY

1 MUTING button

Mutes the sound of your TV. See "Programming Your Remote Control" on page 41 to set up the Remote Control to operate your TV.

2 Number keys

Enter numbers for changing channels and entering setup information.

3 CLEAR button

Closes the Program Banner and Status Bar, and clears the text characters you enter in any text entry box.

4 LIST button

Opens the "Now Playing List" of recorded programs.

5 Navigation arrows and SELECT buttons

Moves the highlighted area or cursor left, right, up, or down, and chooses (selects) the currently highlighted item in a menu.

6 Thumbs Down button

Use to indicate that you don't like a program. You can apply up to three thumbs down for any program.

7 PLAY button

Plays a program at normal speed.

8 PAUSE button

Pauses playback. Once in pause mode, you can use the BACK and FWD (forward) buttons to reverse or advance frame-by-frame.

9 BACK button

Plays a program in reverse fast search mode. Shows a program in reverse frame-by-frame when in pause mode.

10 (Instant) REPLAY button

Replays the previous eight seconds of the current program.

11 VOL (volume) +/– buttons

Controls the volume of your TV. See "Programming Your Remote Control" on page 51 to set up the Remote Control to operate your TV or audio system.

12 **TV POWER button**
Turns your TV or audio system on and off. See “Programming Your Remote Control” on page 41 to set up the Remote Control to operate your TV.

13 **(Stand-by) POWER button**
Puts your SVR Recorder into and out of stand-by mode. When in stand-by mode, the unit can record selected and suggested programs and connect to the TiVo Service as needed.

14 **Remote Active LED**
Flashes while the Remote Control is transmitting signals or being programmed.

15 **ENTER/JUMP button**
Sets the currently entered number as the channel to watch, or jumps back to the previously set channel.

16 **TiVo button**
Opens TiVo Central, which provides access to features and options.

17 **LIVE TV/GUIDE button**
Switches between live TV and program guide.

18 **Thumbs Up button**
Use to indicate that you like a program. You can apply up to three thumbs up for any program.

19 **SLOW button**
Plays a program in slow speed.

20 **FWD (forward) button**
Plays a program in fast search mode. Shows a program frame-by-frame when in pause mode.

21 **ADVANCE button**
Advances the viewing of a program either to the end of a recorded program or to the current time in LIVE TV.

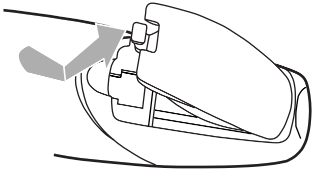
22 **REC (record) ON/OFF button**
Starts or stops recording of the current program.

23 **CH (channel) +/– or PAGE buttons**
Changes the SVR Recorder’s program channel shown on your TV. Also pages up and down in channel and program listing guides.

Installing Batteries

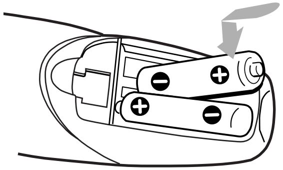
Before you can use the Remote Control, you must insert the supplied batteries. If you want to use this Remote Control to operate other audio/video equipment, such as a TV or stereo, you must program the Remote Control (see page 41).

1 Pull the latch and lift the cover to open the battery compartment.



2 Insert two size AA batteries (supplied).

Be sure to match the + and – marks on the batteries with the + and – marks inside the battery compartment.



3 Close the cover.

Insert the tabs on the cover into the gaps in the rear of the battery compartment. Then, lower the cover onto the Remote Control until you hear the latch click.

Notes

- **When the batteries become weak, the Remote Active LED flashes. If the Remote Control does not work properly, the batteries may be weak.**
- **When replacing batteries, replace both batteries with new ones. Do not mix different types of batteries together.**
- **When you remove the batteries, any manufacturer codes you've programmed may be erased. To program the Remote Control again, see "Programming Your Remote Control" on page 41.**

Connection Examples

This section provides examples showing how to connect the SVR Recorder to your existing antenna, cable, satellite, or audio-visual system. Choose the example closest to your configuration and follow the steps in that section.

Example 1: Antenna or cable, with a VCR, and splitting the signal (see page 16)

Example 2: Antenna or cable, with a VCR (see page 18)

Example 3: Antenna or cable, without a VCR (see page 20)

Example 4: Satellite set-top box with serial connection, and a VCR, using S-Video cables (see page 22)

Example 5: Satellite set-top box with IR input, and a VCR, using S-Video cables (see page 24)

Example 6: Satellite or cable box with IR input, and a VCR, using RF cables (see page 26)

Example 7: Satellite and antenna or cable, with a VCR (see page 28)

Example 8: Satellite and cable with boxes, with a VCR (see page 30)

If you have trouble or if your configuration isn't covered by one of these examples, see "Back Panel Connections Reference" on page 35.

If you have a more advanced system (perhaps including a stereo game system, laser disc player, or switch box), see "General Hints" on page 39.

Note

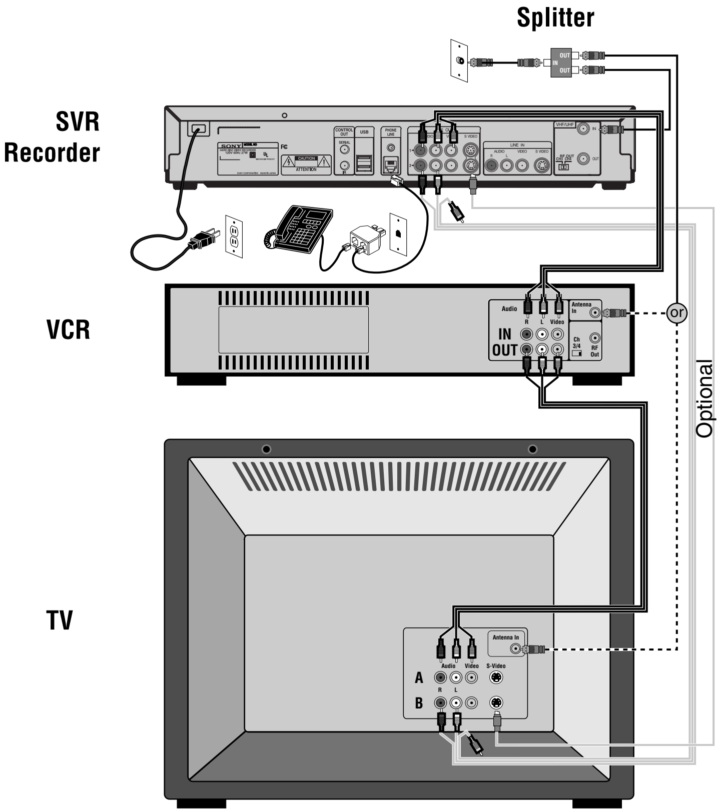
Your SVR Recorder is not designed for carrying heavy loads such as a TV. Structurally, the SVR Recorder is only capable of supporting the weight of one or two common consumer components such as VCRs, DVD players or A/V Receivers (provided they have four good, broad, padded feet for distribution of the weight near the corners of the SVR Recorder).

Note

If you have cable with a set-top box and if you want to split the signal, use the following procedure.

1. **Attach the RF splitter to the RF Coaxial cable coming out of the wall, before it connects to the cable box.**
2. **Connect one of the RF Coaxial cables coming from the RF splitter to the RF In jack on the back of your set-top box.**
3. **Connect the set-top box's RF Out jack to the SVR Recorder's RF In jack using an RF Coaxial cable. This will let the SVR Recorder record your premium channels normally.**
4. **Attach the other RF Coaxial cable coming from the RF splitter to your TV or VCR's RF In. You won't be able to watch premium channels with this connection, but other channels will work fine if your TV or VCR is cable-ready (which most are).**

Example 1: Antenna or cable, with a VCR, and splitting the signal


Splitter
SVR Recorder
VCR
TV
or
Optional
Audio
R
L
Video
Antenna In
IN
OUT
Ch 3/4
RF Out
Antenna In
Audio
Video
S-Video
A
B
R
L

Notes

- **Make sure that all of your TV equipment is turned off, including unplugging your SVR Recorder.**
- **If your TV has only one audio jack instead of two, connect just the white audio cable, and leave the red audio cable disconnected.**

Use this example if you have an antenna or cable without a set-top box, you have a VCR, and you want to split your signal to watch one program while you record another. **You'll need to purchase an RF signal splitter or switch box and at least two extra RF cables at your local electronics store.**

1 Connect the program source cable to the SVR Recorder using the splitter.

The program source cable is the cable that your cable company installed, or the one that's connected to your antenna.

If your TV or VCR can accept multiple inputs, use an RF signal splitter. Once connected, you can switch between watching your SVR Recorder and watching your VCR or TV by changing the "Input" or "Source" on your TV using the appropriate button on your TV's remote.

Attach your existing program source cable to the Input section of the RF splitter. Then connect the splitter to the RF In jack on the back of the SVR Recorder using an RF Coaxial cable.

2 Connect the other splitter output to your TV.

Use another RF Coaxial cable to connect the other output of the splitter directly to your TV.

Once connected, you can switch between watching TiVo and watching TV in bypass mode using your TV's "Input", "Source", or "TV/Video" button (on either your TV or the TV's remote).

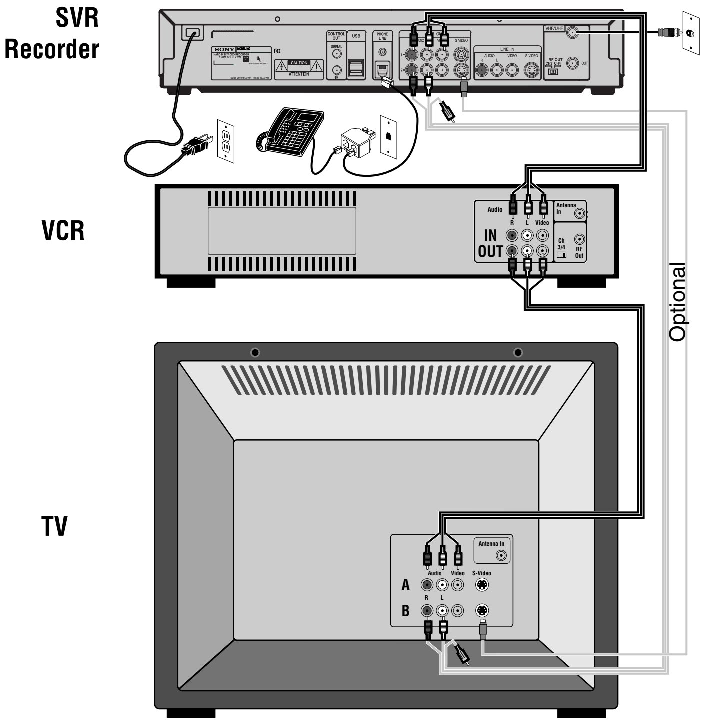
3 Continue.

Now continue with step 3 on page 32.

Note

Make sure that all of your TV equipment is turned off, including unplugging your SVR Recorder.

Example 2: Antenna or cable, with a VCR


SVR Recorder
VCR
TV
Audio
R L Video
IN
OUT
Antenna In
Ch 3/4
RF Out
Antenna In
Audio Video S-Video
A
B
R L
Optional

Use this example if you have an antenna or cable without a cable box, and you have a VCR, and you do not need to split your signal in order to watch one program while you record another.

1 Find your program source cable.

The program source cable is the cable that your cable company installed, or the one that's connected to your antenna. This cable is probably already hooked up to your VCR or TV; if so, disconnect it.

2 Connect your program source cable to the RF In jack on the back of the SVR Recorder.

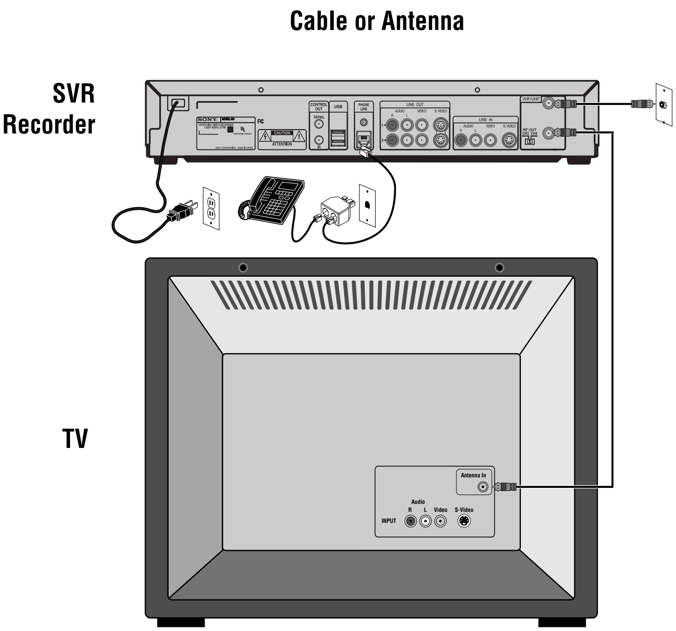
3 Continue.

Now continue with step 3 on page 32.

Note

Make sure that all of your TV equipment is turned off, including unplugging your SVR Recorder.

Example 3: Antenna or cable, without a VCR


Cable or Antenna
SVR Recorder
TV
CONTROL OUT
USB
PHONE LINE
LINE OUT
AUDIO
VIDEO
S VIDEO
LINE IN
VHF/UHF
RF OUT
Antenna In
Audio
R
L
Video
S-Video
INPUT

Use this example if you have an antenna or cable without a cable box, or you do not have a VCR.

1 Find your program source cable.

The program source cable is the cable that your cable company installed, or the one that's connected to your antenna. This cable is probably already hooked up to your VCR or TV; if so, disconnect it.

2 Connect your program source cable to the RF In jack on the back of the SVR Recorder.

3 Connect the SVR Recorder to your TV.

If your TV has a composite video input, connect an Audio/Video cable from the SVR Recorder Output to your TV's Input. If not, connect the RF coaxial cable (supplied) from the RF Out jack on the back of the SVR Recorder to RF In on the back of your TV.

4 Continue.

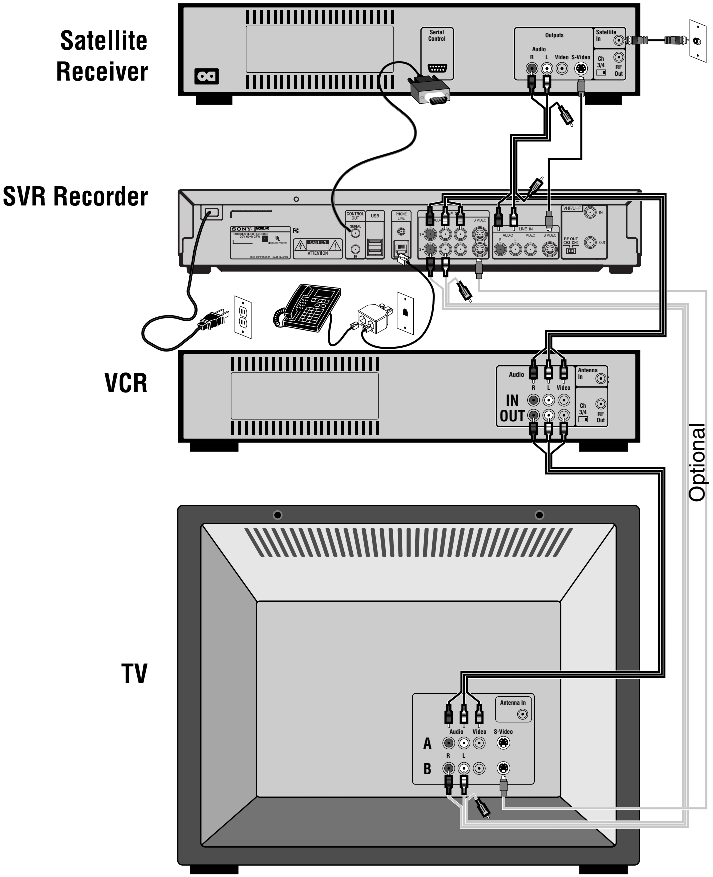
Now continue with step 4 on page 34.

Notes

- **Make sure that all of your TV equipment is turned off, including unplugging your SVR Recorder.**
- **You may need to use the serial adapter (not included) or the RCA Home Control Cable (not included) to connect to your set-top box's Serial Control jack. If you have a Serial Control jack that doesn't work with any of the adapters, use the Cntrl Out IR jack and the IR Control cable instead.**

* Some RCA or Sony satellite receivers have a Home Control Cable connector. (similar to phone jack, but larger).

Example 4: Satellite set-top box with serial connection, and a VCR, using S-Video cables


Satellite Receiver
Serial Control
Outputs
Audio
R
L
Video
S-Video
Satellite In
Ch 3/4
RF Out
SVR Recorder
VCR
Audio
R
L
Video
Antenna In
IN
OUT
Ch 3/4
RF Out
Optional
TV
Antenna In
Audio
Video
S-Video
A
B
R
L

Use this example if you have a satellite set-top box with a serial connection, and your satellite set-top box uses S-video cables.

Note

A serial connection works better than IR, so use serial when possible.

1 Connect the SVR Recorder to your satellite set-top box.

Connect one end of the Serial Control cable (supplied) to the Cntrl Out Serial In jack on the back of the SVR Recorder.

Your satellite set-top box may have two jacks that look like Serial Control jacks. If so, use the one labeled “low speed data.” You may need to use the 9 to 25 pin serial adapter to match your jacks, or the RCA Home Control cable (for some RCA boxes).

2 Connect your program source/video input to the SVR Recorder.

Disconnect any cables that you have connecting your satellite set-top box to your VCR and/or TV. Use the S-Video cable (supplied) to connect the S-Video Out of your satellite set-top box to the S-Video input on the back of the SVR Recorder. You must also use the left (white) and right (red) Audio/Video cables to connect the Audio Out on your satellite set-top box to Audio In on the back of the SVR Recorder, as illustrated here.

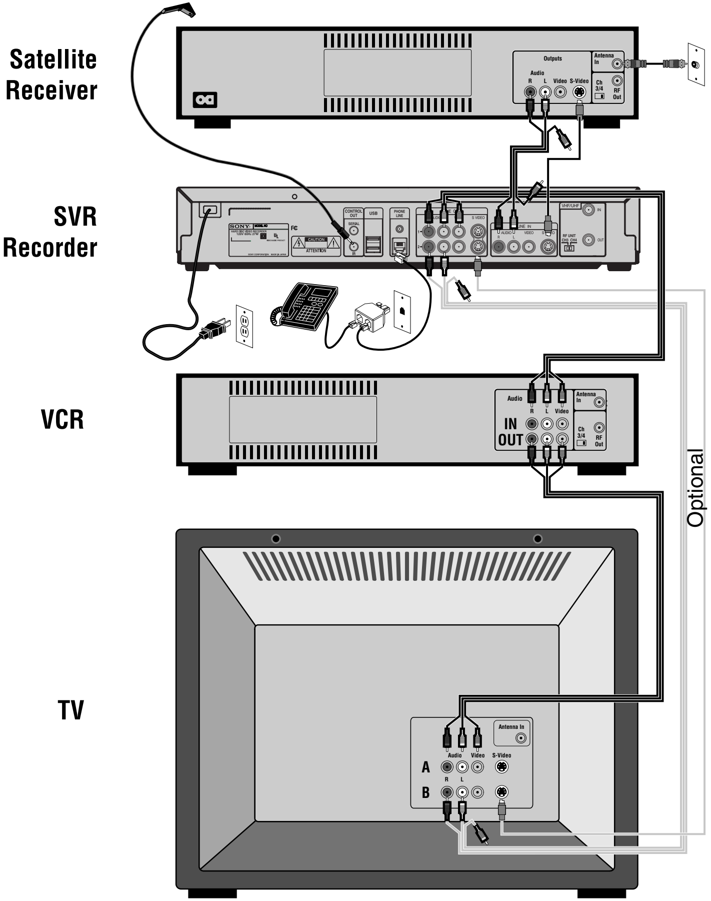
3 Continue.

Now continue with step 3 on page 32.

Notes

- **Make sure that all of your TV equipment is turned off, including unplugging your SVR Recorder.**
- **You may need to purchase a second S-Video cable if one wasn't supplied with your satellite set-top box or VCR.**
- **Since your TV source comes from a box that can only display one channel at a time, it's not possible for you to split your signal and watch one channel on your TV while the SVR Recorder records a different channel.**

Example 5: Satellite set-top box with IR input, and a VCR, using S-Video cables


Satellite Receiver
SVR Recorder
VCR
TV
Outputs
Audio
R
L
Video
S-Video
Antenna In
Ch 3/4
RF Out
Audio
R
L
Video
IN
OUT
Antenna In
Ch 3/4
RF Out
Optional
Antenna In
Audio
Video
S-Video
A
B
R
L

Use this example if you have a satellite set-top box and VCR, no Serial Control jack, and your satellite set-top box uses S-Video cables.

1 Connect the SVR Recorder to your satellite box.

Since you use a satellite set-top box to receive your television signal, the SVR Recorder needs to be able to change channels on your box in order to record shows and display live TV.

Connect the SVR Recorder to the infrared (IR) receiver of your satellite set-top box using the IR Control cable (supplied). Start by plugging the IR Control cable into the Cntrl Out IR jack on the back of the SVR Recorder. Next, locate the IR receiver on your satellite set-top box – it's usually a small dark red window or button on the front of the box.

Place the IR Emitter (from the IR Control cable) on top of the satellite set-top box, sticking out slightly. The IR Emitter has an adhesive strip so you can adhere it to the set-top box. If it is not possible to stick the IR Emitter directly onto the window, place it in front of or as close as possible to the window.

2 Connect your program source/video input to the SVR Recorder.

Disconnect any cables that you have connecting your satellite set-top box to your VCR and/or TV. Use the S-Video cable (supplied) to connect the S-Video Out of your satellite set-top box to the S-Video input on the back of the SVR Recorder. You must also use the left (white) and right (red) Audio/Video cables to connect the Audio Out on your satellite set-top box to the Audio In on the back of the SVR Recorder, as illustrated here.

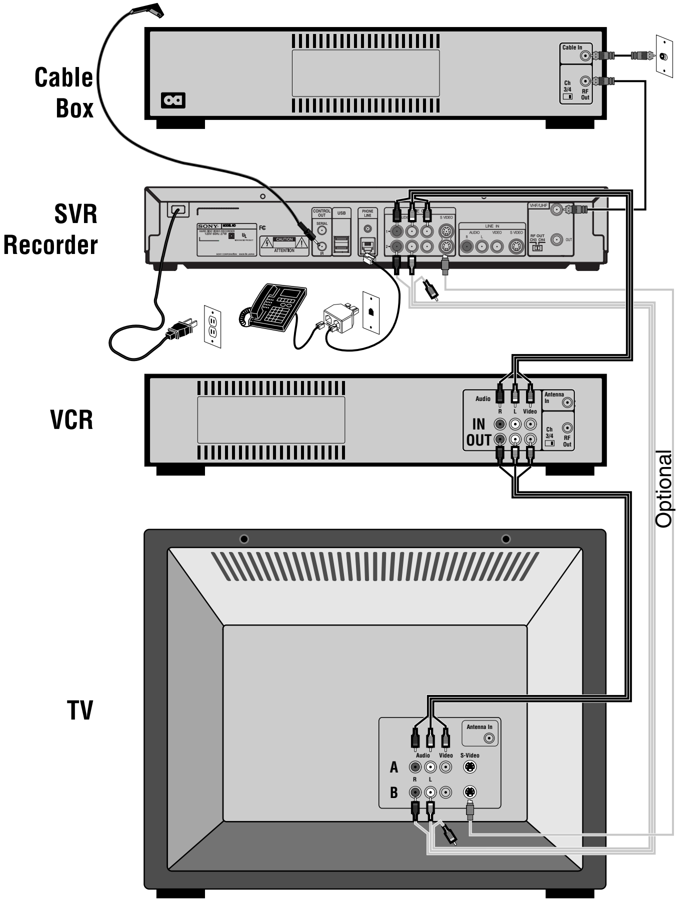
3 Continue.

Now continue with step 3 on page 32.

Notes

- **Make sure all of your TV equipment is turned off, including unplugging your SVR Recorder.**
- **Most satellite set-top boxes have S-Video out or Composite out jacks. Check the back of your satellite set-top box carefully; if there are jacks other than RF Out, follow the steps in Example 4 on page 22.**
- **If you have a cable set-top box that you are only using because your TV and VCR are not cable-ready, and you don't watch premium channels, then you don't need your cable set-top box any more. The SVR Recorder is cable-ready. Follow Example 2 on page 18.**

Example 6: Satellite or cable box with IR input, and a VCR, using RF cables


Cable Box
SVR Recorder
VCR
TV
Cable In
Ch 3/4
RF Out
Audio
R
L
Video
Antenna In
IN
OUT
Ch 3/4
RF Out
Optional
Antenna In
Audio
Video
S-Video
A
R
L
B

Use this example if you have a cable or satellite set-top box, the satellite box has no serial input jack, and the cable or satellite box has no Composite Video and L/R audio output jacks.

1 Connect the SVR Recorder to your cable or satellite box.

Since you use a cable set-top box or satellite set-top box to receive your television signal, the SVR Recorder needs to be able to change channels on your box in order to record shows and display live TV.

Connect the SVR Recorder to the infrared (IR) receiver of your box using the IR Control cable (supplied). Start by plugging the IR Control cable into the Cntrl Out IR jack on the back of the SVR Recorder. Next, locate the IR receiver on your box – it's a small dark red window or button on the box's front.

Place the IR Emitter (from the IR Control cable) on top of your set-top box, sticking out slightly. The IR Emitter has an adhesive strip so you can adhere it to the set-top box. Position the IR Emitter in front of or as close as possible to the window.

2 Connect your program source to the SVR Recorder.

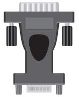
Find the RF coaxial cable coming from the RF Out jack of your satellite box or cable set-top box. This cable is probably already hooked up to your VCR or TV; if so, disconnect it. Now connect this cable to the RF In jack on the back of the SVR Recorder.

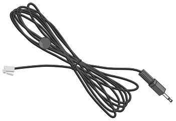
3 Continue.

Now continue with step 3 on page 32.

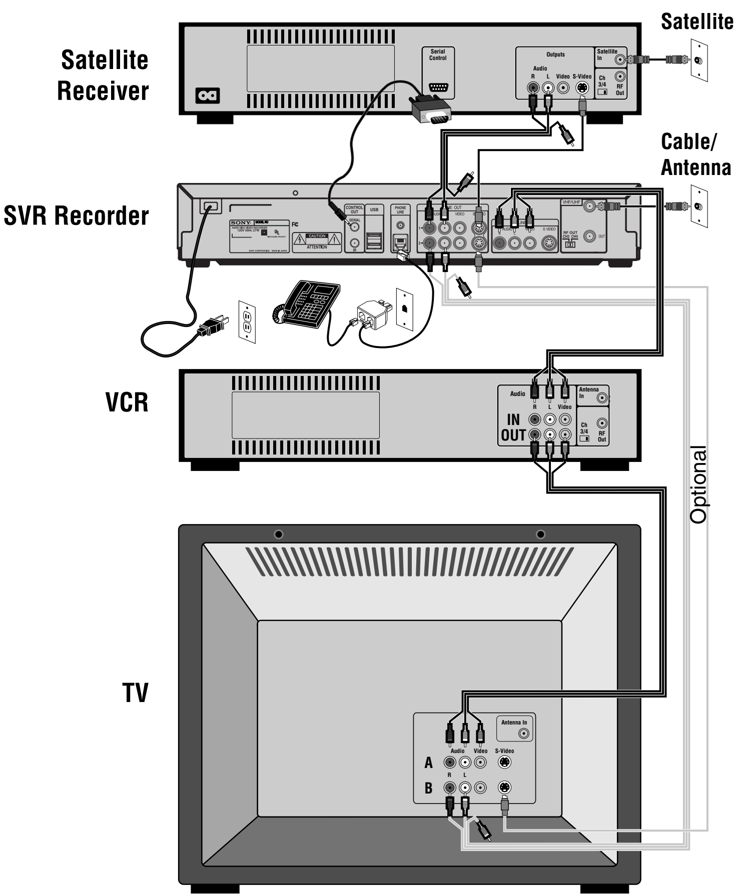
Notes

- **Make sure that all of your TV equipment is turned off, including unplugging your SVR Recorder.**
- **You may need to use the Serial adapter (not included) or the RCA Home Control cable (not included) to connect to your set-top box's Serial Control jack. If you have a Serial Control jack that doesn't work with any of the adapters, use the IR jack and the IR Control cable instead.**





Example 7: Satellite and antenna or cable, with a VCR


Satellite
Satellite Receiver
Serial Control
Outputs
Audio
R
L
Video
S-Video
Satellite In
Ch 3/4
RF Out
Cable/ Antenna
SVR Recorder
VCR
Audio
R
L
Video
Antenna In
IN
OUT
Ch 3/4
RF Out
Optional
TV
Antenna In
Audio
Video
S-Video
A
B
R
L

Use this example if you have a satellite set-top box and either an antenna or cable (with no cable box), and a VCR.

1 Connect the SVR Recorder to your satellite box.

Serial Connection - If your satellite set-top box has a Serial In jack, you can connect the SVR Recorder to your box using the Serial Control cable (supplied). Otherwise, use the IR connection.

IR Connection - Start by plugging the IR Control cable into the Cntrl Out IR jack on the back of the SVR Recorder.

Next, locate the IR receiver on your satellite set-top box – it's usually a small dark red window or button on the front of the box. Place the IR Emitter (from the IR Control cable) on top of the satellite set-top box, sticking out slightly. The IR Emitter has an adhesive strip so you can adhere it to the set-top box. If it is not possible to stick the IR Emitter directly onto the window, place the it in front of or as close as possible to the window.

2 Connect your program source/video input to the SVR Recorder.

a) Disconnect any satellite or antenna/cable connections to your VCR and/or TV. Connect the satellite box to the input of the SVR Recorder using the S-Video cable (preferred) and the left (white) and right (red) Audio/Video cables. If you don't have an S-Video output, use the Yellow Composite Video cable instead.

b) Connect your coaxial antenna or cable to the RF In jack on the back of the SVR Recorder.

3 Continue.

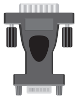
Now continue with step 3 on page 32.

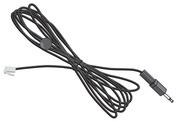
Notes

- **Since you use a satellite set-top box to receive your television signal, the SVR Recorder needs to be able to change channels on your box in order to record shows and display live TV.**
- **A serial connection works better than IR, so use serial if possible.**
- **If your satellite set-top box has two jacks that look like Serial Control jacks, use the one labeled "low speed data." You may need to use the 9 to 25 pin serial adapter to match your box.**

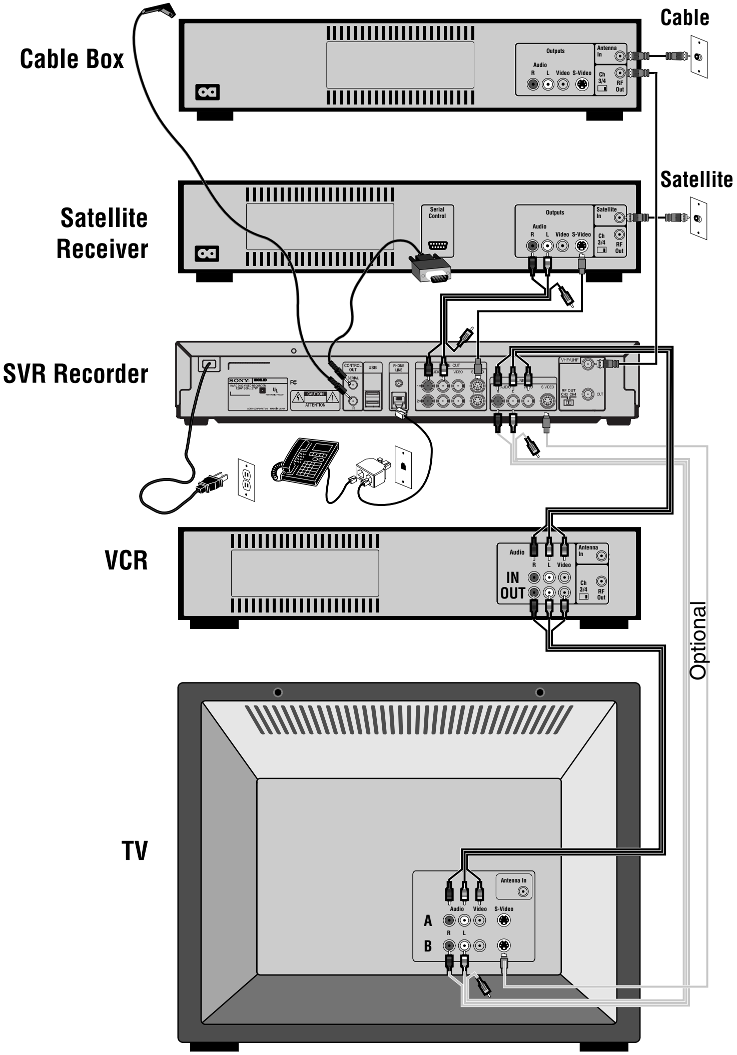
Notes

- **Make sure that all of your TV equipment is turned off, including unplugging your SVR Recorder.**
- **You may need to use the Serial adapter (not included) or the RCA Home Control cable (not included) to connect to your set-top box's Serial Control jack. If you have a Serial Control jack that doesn't work with any of the adapters, use the IR jack and the IR Control cable instead.**





Example 8: Satellite and cable with boxes, with a VCR


Cable Box
Cable
Outputs
Audio
R
L
Video
S-Video
Antenna In
Ch 3/4
RF Out
Satellite
Receiver
Serial Control
Satellite In
SVR Recorder
SONY
CONTROL OUT
USB
PHONE LINE
VHF/UHF
VCR
Audio
R
L
Video
IN
OUT
Optional
TV
Antenna In
Audio
Video
S-Video
A
B

Notes

- **Since you use both a satellite and cable set-top box to receive your television signal, the SVR Recorder needs to be able to change channels on both of your set-top boxes in order to record shows and display live TV.**
- **If your satellite set-top box doesn't include a Serial In jack, then place the other end of the IR Control cable with the second IR Emitter on top of your satellite receiver, in front and as close as possible to the IR window.**

Use this example if you have both a satellite set-top box and a cable set-top box.

1 Connect the SVR Recorder to your satellite box and your cable box.

Serial Connection - If your satellite set-top box has a Serial In jack, connect the SVR Recorder to it using the Serial Control cable (supplied). If your satellite set-top box has two jacks that look like Serial Control jacks, use the one labeled "low speed data." You may need to use the 9 to 25 pin Serial adapter to match your box.

IR Connection - Plug the IR Control cable into the Cntrl Out IR jack on the back of the SVR Recorder. Next, locate the IR receiver on your cable box – it's usually a small dark red window or button on the front of the box. Place the IR Emitter (from the IR Control cable) in front of the IR receiver, sticking out slightly. The IR Emitter has an adhesive strip so you can adhere it to the box. If it is not possible to stick the IR Emitter directly in front of the window, place it as close to the window as possible.

2 Connect your program source/video input to the SVR Recorder.

a) Disconnect any satellite or cable connections to your VCR and/or TV.

b) Connect the satellite box to the input of the SVR Recorder using the S-Video cable (preferred) and the left (white) and right (red) Audio/Video cables. If you don't have an S-Video output, use the Yellow Audio/Video cable instead.

c) Connect your cable set-top box to the RF In jack on the back of the SVR Recorder using the RF Coaxial cable (supplied).

3 Continue.

Now continue with step 3 on page 32.

Continuing Your Connection Steps

Once you’ve completed steps 1 and 2 for your particular connection, continue here with step 3.

3 Connect the SVR Recorder to your TV and/or VCR.

If you don’t have a VCR, skip to step 3c.

3a Video Output to VCR and TV.

First, look at the back of your VCR and see what types of jacks are available. Choose the best you have from the following options, and connect the SVR Recorder output to your VCR input.

- S-Video cable, along with the Left/Right (white and red) Audio cable (best)
- Composite Video (yellow) and Left/Right Audio (white and red) (better)
- RF Out, using the RF Coaxial cable (good)

Next, connect your VCR output to your TV input, again using the best connection available (see Note).

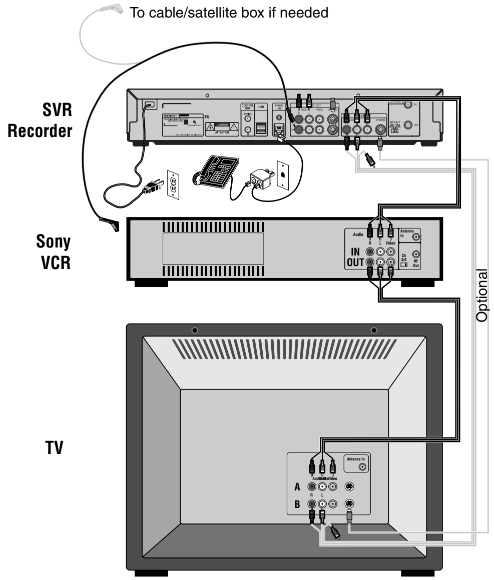
If you are connecting using RF Coaxial cable, you need to select between output on channel 3 or 4 using the Ch 3|4 switch next to the RF Out jack on the back of the SVR Recorder. To get the best picture, select the channel that is not occupied by a local broadcast channel. For example, if there is a local broadcast station on channel 4, select channel 3. You will need to tune your VCR to this channel to receive the SVR Recorder.

Your VCR should also have a switch that controls its channel output. Make sure that both the SVR Recorder and any other equipment are all using the same channel – that is, if the SVR Recorder uses channel 3 for output, you must also set your VCR to use channel 3 for output, and then tune your TV to channel 3 to receive a signal.

Note

Your VCR is probably already hooked up to your TV. So, once you’ve connected the SVR Recorder to your VCR, you’ve also indirectly hooked up the SVR Recorder to your TV. The SVR Recorder will send its signal to your VCR, and in turn your VCR will send the SVR Recorder’s signal to your TV.

IR Output to Sony VCR



Notes

- **If you have a VCR that has S-Video inputs and outputs, and your TV also has an S-Video input, it's preferable to have the SVR Recorder send its signal to your VCR and have your VCR send its signal to your TV. You won't be able to connect the SVR Recorder directly to your TV since the SVR Recorder only has one S-Video Out jack.**
- **Even if you've connected through your VCR, you may want to directly connect the SVR Recorder to your VCR and TV. For example, if your VCR doesn't have S-Video jacks but your TV has an S-Video Input, you probably will want to connect the SVR Recorder directly to your TV to take advantage of the better picture quality of S-Video cables. Also, if your TV has picture-in-picture capabilities, you could watch a videotape on your VCR while you're watching the SVR Recorder.**
- **If your TV has only one audio jack instead of two, connect just the white audio cable, and leave the red audio cable disconnected.**

3b IR Output to VCR - Sony VCRs only.

If you own a Sony VCR, you can use the IR Control cable (supplied) to save programs to a videotape in the VCR using the "Save to my VCR function". (Once connected, refer to your TiVo Viewer's Guide for instructions on how to save programs to your VCR.)

- Plug the IR Control cable into the Cntrl Out IR jack on the back of the SVR Recorder. If you are using a cable or satellite set-top box, you may have already done this.
- Place one IR Emitter (from the IR Control cable) in front of the IR window on the Sony VCR. You can adhere the IR Emitter using its adhesive bottom.

3c Video Output directly to TV.

- If you already did step 3a, this step is optional.
- Look at the back of your TV and the SVR Recorder and see what types of jacks are available. Connect the SVR Recorder output to your TV input using the best possible connection from the following options:
  - S-Video cable, along with the Left/Right (white and red) Audio cable (best)
  - Composite Video (yellow) and Left/Right Audio cable (white and red) (better)
  - RF Output, using the black RF Coaxial cable (good)
- If you are connecting using RF Coaxial cable, you need to select between output on channel 3 or 4 using the small switch next to the RF Out jack on the back of the SVR Recorder. To get the best picture, select the channel that is not occupied by a local broadcast channel. For example, if there is a local broadcast station on channel 4, select channel 3. You will need to tune your VCR to this channel to receive the SVR Recorder.

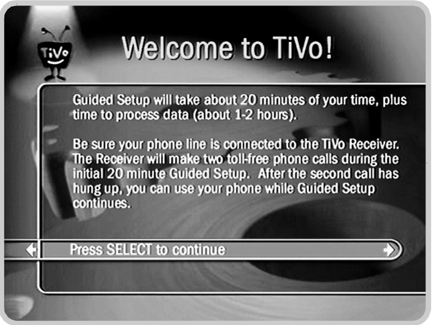
4 Connect the SVR Recorder to your telephone line.

Connect the SVR Recorder to your home telephone line. Use the phone cord (supplied). If you do not have a spare telephone jack for the SVR Recorder, you can plug the phone splitter (supplied) into your telephone jack. Then plug your phone into one of the splitter's jacks and the SVR Recorder into the other.

5 Plug in the SVR Recorder power.

Now you should have everything connected and ready to go. Check all the connections one more time, then turn on your TV equipment. To turn on the SVR Recorder, plug the power cord into the back of the SVR Recorder. After a few moments, you should see TiVo's **Welcome Screen**.

If you do not, you may need to change channels or change which input your TV uses. If you used RF Coaxial cable in step 3, make sure you're viewing the same channel (3 or 4) that you selected. If you're using S-Video or Audio/Video cables, you'll need to change your TV so that it displays the appropriate input. On some TVs, you need to use the "Input" button to switch inputs; other TVs might label this the "Select" or "Video" button. Other TVs require that you keep changing channels until the alternate input is displayed. If you have trouble, double-check your connections and look for help in Additional Information (see pages 45–50).



Welcome to TiVo!

Guided Setup will take about 20 minutes of your time, plus time to process data (about 1-2 hours).

Be sure your phone line is connected to the TiVo Receiver. The Receiver will make two toll-free phone calls during the initial 20 minute Guided Setup. After the second call has hung up, you can use your phone while Guided Setup continues.

6 Guided Setup.

Once you see the **Welcome to TiVo!** screen, (see Tivo Viewer's Guide) to set up and activate the TiVo Service.

Back Panel Connections Reference

This section describes the use of the connection jacks and switch on the back panel of the SVR Recorder. The cables are illustrated on page 8, and the back panel is illustrated on page 10. If your setup doesn't match any of the examples in this section, use this information for general reference.

Phone Line

Connect the SVR Recorder to your phone line using the telephone cord (supplied). If you do not have a spare telephone jack for the SVR Recorder, use the phone splitter (supplied).

Cntrl (control) Out Serial

If you have a satellite set-top box or cable set-top box and it features a Serial In jack (sometimes labeled "Low Speed Data"), you can connect the SVR Recorder to your box using the Serial Control cable (supplied), allowing the SVR Recorder to change channels and control your box. A serial connection works better than an IR, so use serial when possible.

Cntrl (control) Out IR

If you have a satellite set-top box or cable set-top box that doesn't include a Serial In jack, connect the SVR Recorder to the IR sensor of your cable set-top box or satellite set-top box using the IR Control cable (supplied). Start by plugging the IR Control cable into the Cntrl Out IR jack on the back of the SVR Recorder. Next, locate the IR receiver on your cable or satellite set-top box – it's usually a small dark red window or button on the front of the box. Place the IR Emitter (from the IR Control cable) on top of the receiver, sticking out slightly. The IR Emitter has an adhesive strip so you can adhere it to the set-top box. If it is not possible to stick the IR Emitter directly onto the receiver, place it in front of or as close as possible to the receiver. Ignore this jack if you're using the Cntrl Out (Serial) jack.

You can also use the IR Control cable to save programs to your Sony VCR. Plug the supplied IR Control cable into the Cntrl Out IR jack on the back of the SVR Recorder. Position the first IR Emitter in front of the IR receiver on your Sony VCR. You can secure the IR Emitter (from the IR Control cable) using the supplied adhesive strip. Optionally, position the second IR Emitter in front of the IR receiver on your satellite set-top box or cable set-top box so it is slightly extended.

Once this connection is made, refer to your TiVo Viewer's Guide for instructions on how to save programs to your VCR.

Audio R and L Inputs

Use these jacks if you have a satellite set-top box, cable set-top box, or digital cable set-top box. Connect the left (white) and right (red) audio out jacks of your set-top box to the SVR Recorder's audio input using the Audio/Video cables (supplied). Note that you will use these jacks for audio if you're using either the yellow Video Input or S-Video Input. Ignore these jacks if you're using the RF In jack.

Composite Video Input

Use this jack if your satellite set-top box, cable set-top box, or digital cable set-top box does not include an S-Video Output jack. Connect the Video Out of your set-top box to the SVR Recorder using the video connector (yellow) on the Audio/Video cables (supplied). Use this jack only if you can't use S-Video Input. Ignore this jack if you're using the RF In jack.

S-Video Input

S-Video will result in a higher quality image than composite video, so use this jack if you have a satellite set-top box or cable set-top box that features an S-Video out jack. Connect the S-Video Out from your set-top box to the SVR Recorder using the S-Video cable (supplied).

Audio R and L Outputs (2 each)

If your TV or stereo features audio input jacks, connect the left (white) and right (red) Audio Output jacks from the SVR Recorder to your TV or stereo using the Audio/ Video cables (supplied). If you have both a TV and a VCR, you might use one set of Audio cables for the TV and the other cables for the VCR; see pages 15 through 31 for examples. Ignore these jacks if you're using the RF Out jack.

Composite Video Outputs (2)

If your TV or VCR features a Composite video jack but doesn't have an S-Video input, connect the SVR Recorder to your TV or VCR's Video In using the yellow video connector on the Composite Audio/Video cables (supplied). If you have both a TV and a VCR, you might use one cable for the TV and the other cable for the VCR. Ignore this jack if you're using S-Video Output or the RF Out jack.

S-Video Output

If your TV or VCR features an S-Video input jack, connect it to the SVR Recorder using a second S-Video cable (not supplied). S-Video is preferred over other connections since it provides the highest quality picture. Ignore this jack if you're using Composite Video Outputs or RF Out – but you should disconnect those other connections and use this one instead if your TV or VCR does feature an S-Video input jack.

RF In

If you have cable or an antenna and don’t have a satellite set-top box or cable set-top box, connect your cable or antenna to the SVR Recorder using your existing coaxial cable (the one coming out of the wall). Ignore this jack if you’re using Audio/Video Input or S-Video Input. If you have a cable box that features both RF Out and S-Video output or Audio/Video output, choose S-Video or Audio/Video instead of RF.

RF Out

If your TV has multiple inputs and you can use the SVR Recorder’s S-Video Output or Audio/Video Output, do not use the RF Out jack. But if your TV only has RF In, connect the SVR Recorder to your TV’s RF In using the RF Coaxial cable, and see “Ch 3|4 Switch” below. Use the Remote Control supplied with the SVR Recorder to change program channels shown on your TV.

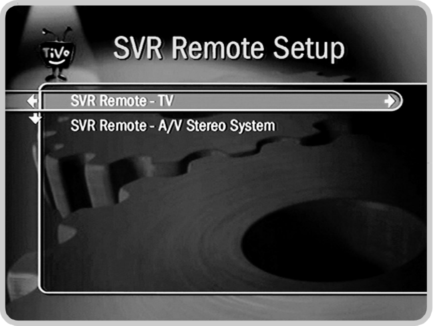
Ch 3/4 Switch

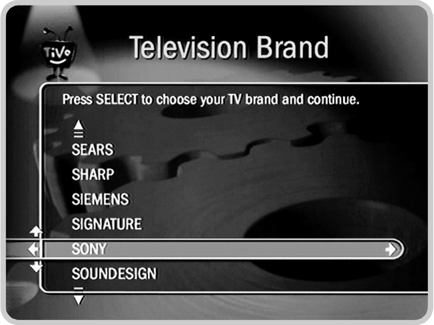
If you use RF Out, set the output to channel 3 or 4 using this switch. To get the best picture, select the channel that is not occupied by a local broadcast channel. For example, if there is a local broadcast station on channel 4, select channel 3 for the output on the SVR Recorder. You will need to tune your television to this channel (3 or 4) to receive a signal through the SVR Recorder.

USB (Universal Serial Bus.) For future use

General Hints

- Study the “Back Panel Connections Reference” section on page 35 to learn what jacks are available on your SVR Recorder.
- Make sure the SVR Recorder receives its signal from your TV source. Work out where your TV signal comes from (satellite, cable or antenna). If you have to go through a switch box or set-top box or stereo, test the output cable on your TV before taking that output and plugging it into the SVR Recorder’s input jacks.
- Decide where the SVR Recorder should send its signal. You’ll need to get the signal to your TV eventually, but you could choose to have the video signal go through a VCR or to a switch box or A/V receiver before it reaches the TV. If you want the SVR Recorder to be able to save shows to a VCR, you’ll also need to have the SVR Recorder’s output go to a VCR.
- You may have a lot of sources of video. In addition to the SVR Recorder and a VCR, you may have a video game player, a laser disc player, a DVD player, and a video camera. If so, consider using a switch box or an A/V receiver that has input jacks for your devices, along with an output to your TV and speakers. Then, that A/V receiver or switch box will let you choose what to display on your TV.
- If you’re having trouble, see Troubleshooting on pages 45–50. Also, try the Support section on the TiVo website (http://www.tivo.com/).




Press SELECT to choose your TV brand and continue.

Programming Your Remote Control

You can set your Remote Control to control your TV's power, muting, and volume by using the "Remote Control Setup" option on the **Messages & Setup** screen. Or you can set your Remote Control to control the volume on your stereo if you have it connected to your TV.

Once you've followed these steps to tell your Remote Control how to control your TV, you'll be able to put away your TV's remote and use the Remote Control from now on. You'll only need your VCR's remote for watching videotapes.

Follow these steps to set up your Remote Control using the on-screen code entry method. If this method doesn't work, try the Learning Mode Method (page 43) or Code Search Method (page 44) methods.

1 Start at TiVo Central.

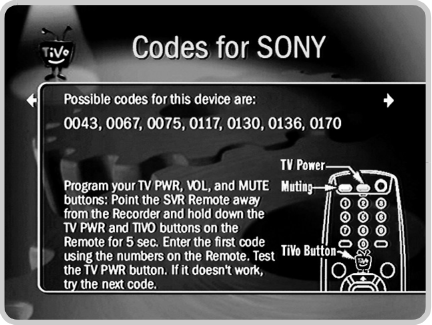
Press the TiVo button to go to TiVo Central.

2 Navigate to SVR Remote - TV.

Choose "Messages & Setup", then "SVR Remote Setup", then "SVR Remote - TV".

3 Identify your TV.

Use the CH (Channel) +/– buttons to scroll down the list of TV brands page by page, choose your TV brand from the list, and press SELECT. If you have been using a TV remote control other than the one that came with your TV, select your TV brand, not the brand of the remote.


Codes for SONY

Possible codes for this device are:

0043, 0067, 0075, 0117, 0130, 0136, 0170

Program your TV PWR, VOL, and MUTE buttons: Point the SVR Remote away from the Recorder and hold down the TV PWR and TIVO buttons on the Remote for 5 sec. Enter the first code using the numbers on the Remote. Test the TV PWR button. If it doesn't work, try the next code.

Note

If you have your stereo hooked up to your TV, you can program the Remote Control's VOL (volume) and MUTING buttons to send signals to your stereo rather than to your TV. Go to "Messages & Setup", then "SVR Remote Setup", then "SVR Remote - TV". Press the TiVo and VOL buttons to illuminate the LED before you enter the code.

4 Enter the Remote Control code.

When you select your TV brand, you will see a screen with one or more four-digit codes for your TV.

a) Cover the end of the Remote Control with your hand to shield the IR Emitter.

b) On the Remote Control, press and hold the TiVo and TV POWER buttons simultaneously for about three seconds, until the remote's LED illuminates. Release the buttons and the LED will remain illuminated.

c) Use the number keys on your Remote Control to enter the four-digit code you want to test (start with the first code in the list on the screen).

d) After pressing the fourth digit of the code, the LED will flash three times, indicating that you entered a valid code.

e) Test the code by pointing your Remote Control in the direction of the TV and pressing the TV POWER button. If this turns the TV off, you have found the correct code. Now you can use the Remote Control to turn your TV on and off, control volume, and mute the sound.

f) If the Remote Control could not turn your TV off, try the next code listed for your TV.

Note

- **You can program the following keys with the Learning Remote method:**
  TV POWER, VOL (volume) +/–, and MUTING.
- **Do not attempt this method if there is bright fluorescent lighting or other IR interference.**
- **Unlike code entry and code search, you need to program each button individually in learning mode.**
- **If you have a stereo system connected to the SVR Recorder, you can program the POWER button on the Remote Control to turn on/off your stereo. To do so, use code 1975 instead of 0975 in step 1. You can program the POWER button to turn on/off both your TV and your stereo.**
- **To reset the Remote Control back to the manufacturer's settings, press and hold the TiVo and TV POWER buttons together for three seconds until the LED on the Remote Control remains lit. Enter code 0981 (or 1981) using the number keys on the Remote Control.**

Learning Mode Method

The Remote Control has the ability to "learn" codes from your TV (and/or audio system) remote. This method works for every remote controlled TV (or stereo).

1 Put the Remote Control in learning mode.

a) Press the TiVo button and TV POWER simultaneously for 3 seconds until the LED on the Remote Control remains lit continuously.

b) Using the number keys on the Remote Control, enter the code 0975. The Remote Control LED flashes three times. You have 30 seconds to complete the next step.

2 Position the two remotes.

Position the TV remote and the Remote Control head-to-head about two inches apart with their IR emitters facing each other. (The Remote Control's IR emitter is at the end that you point at the TV.)

3 Send the signal to the Remote Control.

a) Press the button on the Remote Control that you want to teach. For example, TV POWER or MUTING. The Remote Control LED will flash rapidly to indicate that it is ready to be taught. You have 4 seconds to do the next step.

b) Press the equivalent button on the TV remote. For example, if you pressed TV POWER on the Remote Control, press the power button on the TV remote.

c) Press and hold the equivalent button on the TV remote until the Remote Control's LED flashes three times to indicate that it has learned the code, or repeat this step until the LED does flash three times.

d) This step can be repeated as many times as needed.

4 Exit learning mode and test the code.

a) Press the CLEAR button on the Remote Control to exit learning mode.

b) Point the Remote Control at the TV and press the button you just taught. For example, if you've just taught the TV POWER button, it should turn on the TV.

Code Search Method

Another method of programming the Remote Control to operate your TV and/or stereo system is the code search method. The Remote Control has hundreds of available codes. The correct code for your TV might be available, yet not listed on the screen for your TV brand.

1 Put the Remote Control in code search mode.

a) Press the TiVo button and TV POWER simultaneously for three seconds until the LED on the Remote Control remains lit continuously.

b) Release the buttons and the LED remains illuminated.

c) Using the number keys on the Remote Control, enter the code 0999.

2 Test the code.

a) Point the Remote Control at the TV, press TV POWER and see if the TV turns off or on.

b) If the TV does turn off or on, confirm that MUTE and VOL (volume) +/– also operate the TV. If they do, go to step 4 below. If they do not, continue with step 3.

3 Try another code.

Continue to cycle through each code by pressing CH+, then test the code by repeating step 2 above. Remember, there are hundreds of codes. If the LED goes out. you have reached the end of the codes.

4 Program the Remote Control with the correct code.

a) When the code allows the Remote Control to operate the TV power, volume and muting, press ENTER to set the code and exit Code Search mode.

b) You can also press CLEAR to exit Code Search mode without setting a new code.

Note

- **In this method, when you find the correct code, it will automatically program the TV POWER, VOL +/–, and MUTING buttons on the Remote Control.**
- **If you have a stereo system connected to the SVR Recorder, you can program the POWER button on the Remote Control to turn on and off both the stereo and your TV. To do so, use code 1999 instead of 0999 in step 1.**
- **To reset the Remote Control back to the manufacturer's settings, press and hold the TiVo and TV POWER buttons together for three seconds until the LED on the Remote Control remains lit. Enter code 0981 (or 1981) using the number keys on the Remote Control.**

Troubleshooting

TiVo and Sony are dedicated to providing you with quality support and customer service. If you have any questions or difficulties, first refer to the troubleshooting section in the manuals. If you still need help, see below for the appropriate customer service department to contact:

Please go to http://www.sel.sony.com/sel/service/conselec and refer to the FAQ if you need assistance on the following areas:

- Connecting your SVR Recorder with your TV and other A/V equipment.
- Initial Guided Setup difficulties (e.g. phone calls failing).
- Programming the Remote Control to control your TV or A/V equipment.
- Changing channels.
- A system that does not function properly after restart.
- Questions about your Warranty.

Contact TiVo at 1-877-367-8486 if you need assistance on the following areas:

- Activating or using a feature of the TiVo Service.
- Getting correct channel lineup data or program guide data.
- Understanding an onscreen message from TiVo regarding your TiVo Service account.

You can also refer to the FAQ’s listed in the web sites below.
TiVo: http://www.tivo.com
You can also call Sony at 1-877-585-Sony (7669)

When you call either TiVo or Sony, you will need to reference your model and serial number located on the inside of the back cover of this Installation Guide.

Symptom	Solution

My SVR Recorder isn't making the setup phone calls.	• Do not use a wireless phone connection.
	• Verify that your phone line is working by connecting a phone to the phone cord and checking for a dial tone. Make sure the phone cord is connected to the SVR Recorder and the wall jack.
	• Try another local dial-in number from the **Dial In Numbers** screen. For information on how to change the local dial-in number and other phone dialing options, refer to the TiVo Viewer's Guide.
	• You may need to change your phone dialing options from the default. After making changes, make a test call (choose "Make Test Call" from the **Phone Connection** screen).
	  • If you have voice mail or other non-standard dial tone, turn off "dial tone detection".
	  • If you have call waiting, disable it by entering the correct prefix in "Call Waiting Prefix" (usually "*70,").
	  • If you use a dial prefix for outside lines, set "Dial Prefix" (for example, "9,").
	  • Your phone line may have low voltage. Try turning off "phone availability detection".
	• If you have a caller ID box, try removing it from the line since some models interfere with the SVR Recorder modem's ability to make a call.
	• If you have a fax machine or computer modem connected to the same line, make sure they are not using the line.
	• It could be that you have too much line noise to make a connection. The SVR Recorder ships with a 50' phone cord. Try a shorter cord, or you can buy a line noise filter at your local electronics store.
	• If the recorder repeatedly reports a busy signal trying to connect, try choosing a different local dial-in number, or try making the call during off-peak hours.

Symptom	**Solution**
On the “Channels You Watch” screen, some or all of my lineup information is incorrect.	From within Guided Setup, go left to the **Cable Providers** and **Cable Lineups** screens and verify that you chose the correct cable/satellite provider and lineup. You may need to go through all of the selections to find the right one since cable providers are often changing their names and lineups.
My channels aren’t changing. (continued on next page)	**If you use cable with no set-top box:** • Be sure that you are using the SVR Recorder’s Remote Control and that you hold it so that the TiVo button points toward the SVR Recorder. • When you press any button on the Remote Control, does the Remote Active LED flash? If the LED does not flash, check to make sure that the batteries are positioned correctly in the Remote Control and that the batteries are good. If the LED does flash, make sure the green receiving light on the SVR Recorder flashes yellow when you press any button on the Remote Control. If it does not, power cycle your SVR Recorder (unplug the AC power cord, wait 15 seconds, then reinsert the AC power cord). It may be necessary to do this several times. **If you use cable with a set-top box:** • Make sure the set-top box is turned on. • Make sure you are using the Remote Control and that you hold it so that the TiVo button points toward the SVR Recorder, not the cable box. • Is the IR Control cable plugged into the lower IR jack on the back of the SVR Recorder? • Is the IR Emitter positioned so that it covers the IR receiver on the cable box? • Did you select a working code from the list of codes for your cable box during Guided Setup? To verify, use the TiVo button to go to **TiVo Central** -> **Messages & Setup** -> **Cable/Satellite Box** -> **Control Cable Setup**. Once you find a code that changes your channels, press SELECT to choose that code.

Symptom	Solution
My channels aren't changing. (continued)	**If you use a satellite set-top box with a Serial Control cable:** • Make sure the set-top box is turned on. • Is the Serial Control cable plugged into the upper serial jack on the back of the SVR Recorder? • Make sure that the Serial Control cable is connected to the "low speed data" jack on the back of the satellite set-top box. • Unplug the satellite set-top box from the wall, then plug it back in. If you are using an RCA satellite set-top box, use your RCA set-top box's remote control to specify low speed data. To do this, press the MENU button on the RCA set-top box's remote -> **Options** -> **System Options** -> **Data Port** -> **Low Speed Data**. **If you use a satellite set-top box with an IR Control cable:** • Make sure the set-top box is turned on. • Is the IR Control cable plugged into the lower IR jack on the back of the SVR Recorder, not the cable box. • Is the IR Emitter positioned so that it covers the IR window on your satellite box? • Did you select a working code from the list of codes for your satellite box during Guided Setup? To verify this, use the TiVo button to go to **TiVo Central** -> **Messages & Setup** -> **Cable/Satellite Box** -> **Control Cable Setup**. Once you find a code that changes your channels, press the SELECT button on the Remote Control to choose that code.

Symptom	Solution
When I power on my TV, I see a blue screen with a frowning TiVo in the upper left corner of my screen.	Your SVR Recorder is having trouble tuning to the channel you are on. Follow these steps to restore the video: • If you have a cable/satellite set-top box, make sure it is turned on. • Try changing channels. If you see the frowning TiVo on every channel, your video cable may have come loose. Check to make sure all the cable connections on the back of your SVR Recorder are secure. • Verify that you are receiving a video signal by temporarily connecting the video source directly to the TV. • Power cycle your SVR Recorder (unplug the AC power cord, wait 15 seconds, then reinsert the AC power cord). • Try swapping out your video cables to determine if one of your cables is bad. • Go to Messages and Setup and choose “Cable/Satellite Box,” then choose “Connection to Recorder.” Verify that the cable that is selected on this screen is the same cable you have used to connect your set-top box to the SVR Recorder. The “Video Status” on this screen should say “OK” when the correct input is selected.
I don’t see my cable provider on the list in Guided Setup.	• If you are in Guided Setup, use the LEFT ARROW to go to the **Zip Code** screen to verify that you entered the correct zip code. • Go through the first setup call again. See “First Setup Call” in Guided Setup. • Check all of the cable providers listed for your Zip Code. Make sure your cable company hasn’t merged or changed its name.

Symptom	Solution
Audio/Video is out of sync.	• Try changing channels. • Press the PAUSE button on the Remote Control, move back a frame or two, then press PAUSE again to resume play. • Press the TiVo button to go to TiVo Central, then press the LIVE TV button to return to live television. • Power cycle your SVR Recorder (unplug the power cord, wait 15 seconds, then reinsert the power cord). • If you are using your stereo, it must be hooked up between the SVR Recorder and your TV to avoid an audio/video delay.

Specifications

Inputs and outputs

- Video In
  - S-Video 4-pin mini DIN (1)
  - Composite Video RCA (1)
- Video Out
  - S-Video 4-pin mini DIN (2)
  - Composite Video RCA (2)
- Audio Line In
  - Stereo L/R RCA (1 pair)
- Audio Line Out
  - Stereo L/R RCA (2 pairs)
- RF In
  - F-connector Female (1)
- RF Out
  - F-connector Female (1)
- Telephone
  - RJ-11 female, 2 wire (1)
- Control Out
  - 3.5 mm mini jack sockets (2)

General

- Power requirements
  - 120 V AC, 60 Hz
- Power consumption
  - 29 W
- Operating temperature
  - 21°C to 45°C (70°F to 113°F)
- Operating Humidity
  - 5% to 80%
- Dimensions
  - Approx. 430 × 326 × 77 mm (w/h/d)
  - (Approx. 17 ¼ × 3 ⅞ × 13 ⅛ inches) including projecting parts and controls
- Mass
  - Approx. 4.5 kg (9 lb 1 oz)

Supplied accessories

- Remote Control (1)
- Size AA (R6) batteries (2)
- Audio/Video cables (1)
- IR Control cable (two IR emitters) (2)
- Serial Control cable (1)
- S-Video cable (1)
- Phone cord (1)
- Phone splitter (1)

FCC Regulations and Information

This device complies with Part 68 of the FCC rules. The FCC Part 68 label is located on the back of this product. This label contains the FCC number for this equipment and the Ringer Equivalence Number (REN). If requested, this information must be provided to your telephone company.

Your SVR Recorder has been registered by the Federal Communication Commission (FCC) as not being harmful to the telephone network when connected directly to the telephone lines. In order to fully comply with the Rules of the FCC, the following instructions should be read carefully and followed completely where applicable:

1. The Federal Communication Commission (FCC) has established Rules which permit this device to be directly connected to the telephone network. Standardized jacks are used for these connections. This equipment should not be used on party lines or coin phones.
2. If this device is malfunctioning, it may also be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.
3. The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes. You will be advised of your right to file a complaint with the FCC.
4. If the telephone company requests information on what equipment is connected to their lines, inform them of:
    a. The telephone number to which this unit is connected.
    b. The ringer equivalence number.
    c. The USOC jack required.
    d. The FCC Registration Number.
5. Items (b) and (d) are indicated on the label. The Ringer Equivalence Number (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5). If too many devices are attached, they may not ring properly.

Declaration of Conformity

Trade Name:	Sony
Model No.:	SVR-3000
Responsible Party:	Sony Electronics Inc.
Address:	1 Sony Drive, Park Ridge, NJ 07656 USA
Telephone No.:	201-930-6972

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Service Requirements

In the event of equipment malfunction, all repairs should be performed by Sony or an authorized agent. It is the responsibility of users requiring service to report the need for service to our company or to one of our authorized agents. For service, call 1-877-585-SONY (7669).

Radio Interference Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception (which you can determine by turning the equipment off and on), you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna (the antenna for radio or television that is receiving the interference)
- Change the position of the SVR Recorder with respect to the radio or television equipment that is receiving the interference
- Move the SVR Recorder away from the equipment that is receiving the interference
- Plug the SVR Recorder into a different outlet so that the SVR Recorder and the equipment receiving the interference are on different branch circuits

Shielded I/O cable and cords must be used for this equipment to comply with the relevant FCC regulations. Changes or modifications not expressly approved in writing by Sony Electronics, Inc., void the user’s authority to operate this equipment.
If these measures do not eliminate the interference, you should consult your SVR Recorder dealer or an experienced radio/television technician for additional suggestions. In addition, you may find the following booklet prepared by the Federal Communications Commission helpful: “How to Identify and Resolve Radio-TV Interference Problems.” This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402 Stock No. 004-000-00345-4.

IMPORTANT SAFETY INSTRUCTIONS

1 Read these instructions.

2 Keep these instructions.

3 Heed all warnings.

4 Follow all instructions.

5 Do not use this apparatus near water.

6 Clean only with dry cloth.

7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8 Do not install near any heat sources such as radiators, heat resisters, stoves, or other apparatus (including amplifiers) that produce heat.

9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11 Only use attachments/ accessories specified by the manufacturer.

12 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13 Unplug this apparatus during lighting storms or when unused for long periods of time.

14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

SONY®

LIMITED WARRANTY

Sony Electronics Inc. (“Sony”) warrants this Product (including any accessories) against defects in material or workmanship as follows:

1. LABOR: For a period of 90 days from the date of purchase. If this Product is determined to be defective, Sony will repair or replace the Product, at its option, at no charge, or pay the labor charges to any Sony authorized service facility. After the Warranty Period, you must pay for the labor charges.

2. PARTS: In addition, Sony will supply, at no charge, new or rebuilt replacements in exchange for defective parts for a period of one (1) year. After 90 days from the date of purchase, labor for removal and installation is available from Sony authorized service facilities or a Sony Service Center at your expense.

To obtain warranty service, you must take the Product, or deliver the Product freight prepaid, in either its original packaging or packaging affording an equal degree of protection to any authorized Sony service facility.

This warranty does not cover customer, instruction, installation, set up adjustments, or signal reception problems.

This warranty does not cover cosmetic damage, or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of the Product, including the antenna. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by Sony to service the Product. This warranty is valid only in the United States.

Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the warranty period must be presented to obtain warranty service.

This warranty is invalid if the factory-applied serial number has been altered or removed from the Product.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. SONY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS ACCESSORY. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS ACCESSORY IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. In addition, if you enter into a service contract with the Sony Partnership within 90 days of the date of sale, the limitation on how long an implied warranty lasts does not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

For your convenience, Sony Electronics Inc. has established telephone numbers for frequently asked questions.

To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, call:

Sony Direct Response Center
1-877-585-SONY (7669)
or write to:
Sony Direct Response Center
12451 Gateway Blvd.
Fort Myers, FL 33913

For an accessory or an accessory or part not available from your authorized dealer, call:
1-(800)-488-7669

Printed in USA

Refer to this Installation Guide (specifically
the Troubleshooting section) for questions about
your Warranty, connecting the SVR Recorder,
initial Guided Setup difficulties (e.g. phone calls failing),
programming the Remote Control,
changing channels, or if your system
does not function properly after restart.
If you still have questions, contact Sony at:
http://www.sel.sony.com/sel/service/conselec

Refer to The TiVo Viewer's Guide
for questions about TiVo Service activation,
getting correct channel lineups or program
guide data, or on-screen messages from
TiVo regarding your Service account.
If you still have questions, contact TiVo at:
http://www.tivo.com

Printed in Japan

PRINTING THE SERVICE MANUAL

The PDF of this service manual is not designed to be printed from cover to cover. The pages vary in size, and must therefore be printed in sections based on page dimensions.

NON-SCHEMATIC PAGES

Data that does NOT INCLUDE schematic diagrams are formatted to 8.5 x 11 inches and can be printed on standard letter-size and/or A4-sized paper.

SCHEMATIC DIAGRAMS

The schematic diagram pages are provided in two ways, full size and tiled. The full-sized schematic diagrams are formatted on paper sizes between 8.5” x 11” and 18” x 30” depending upon each individual diagram size. Those diagrams that are LARGER than 11” x 17” in full-size mode have been tiled for your convience and can be printed on standard 11” x 17” (tabloid-size) paper, and reassembled.

TO PRINT FULL SIZE SCHEMATIC DIAGRAMS

If you have access to a large paper plotter or printer capable of outputting the full-sized diagrams, output as follows:

1) Note the page size(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.

2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your large format printer. Confirm that the printer settings are set to output the indicated page size or larger.

3) Close the Print Set Up screen and return to the File menu. Select “Print...” Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

TO PRINT TILED VERSION OF SCHEMATICS

Schematic pages that are larger than 11” x 17” full-size are provided in a 11” x 17” printable tiled format near the end of the document. These can be printed to tabloid-sized paper and assembled to full-size for easy viewing.

If you have access to a printer capable of outputting the tabloid size (11” x 17”) paper, then output the tiled version of the diagram as follows:

1) Note the page number(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.

2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your printer. Confirm that the plotter settings are set to output 11” x 17”, or tabloid size paper in landscape (▭) mode.

3) Close the Print Set Up screen and return to the File menu. Select “Print...” Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

TO PRINT SPECIFIC SECTIONS OF A SCHEMATIC

To print just a particular section of a PDF, rather than a full page, access the Graphics Select tool in the Acrobat Reader tool bar.

1) To view the Graphics Select Tool, press and HOLD the mouse button over the Text Select Tool which looks like:
This tool will expand to reveal to additional tools.
Choose the Graphics Select tool by placing the cursor over the button on of the far right that looks like:

2) After selecting the Graphics Select Tool, place your cursor in the document window and the cursor will change to a plus (+) symbol. Click and drag the cursor over the area you want to print. When you release the mouse button, a marquee (or dotted lined box) will be displayed outlining the area you selected.

3) With the marquee in place, go to the file menu and select the “Print...” option. When the print window appears, choose the option under the section called “Print Range” which says “Selected Graphic”.

Select OK and the output will print only the area that you outlined with the marquee. ⬚

(continued >)

ON-SCREEN SEARCH OPTION

All of the text within the service manual PDF is content searchable. This means that you can enter any text, word, phrase or reference number that appears in the manual, and the PDF software will search, find and move the cursor to the location where you requested text first appears. This feature can be particularly useful in locating components on a specific schematic or printed wire circuit board (PWB) diagrams.

Follow these steps to effectively locate a component on a schematic diagram:

1) Locate the schematic you want to search by clicking on the corresponding bookmark on the left side of the screen. The view on the right of the screen will then jump to the desired schematic page.

2) Magnify the diagram to at least 400% before conducting a component search. This will enable you to easily view the reference number when it is highlighted on screen. To do this, click on the magnifying glass button on the tool bar at the top of the screen. Move the cursor over the diagram and RIGHT click you mouse. Select the 400% magnification option on the pop-up menu. Click on the button with the icon of the open hand to deactivate the magnification tool

3) Search the diagram (or the entire manual) by clicking on the binocular button tool at the top of the screen. The “Find” window will appear and allow you to type in your desired text. Type in a reference designator, such as R502, and click on the “Find” button. If the component is not on the diagram, but is listed anywhere else in the manual, the cursor will jump to the first location the text is found in the file. To find another instance of that same text, click on the binocular button again and select “Find Again.”

Self Diagnosis
Supported model

SERVICE MANUAL

SVR-3000 RMT-V303

US Model

CORRECTION- 1

SUBJECT: ELECTRICAL PARTS BATTERY COVER P/N

Correct the service manual as shown.
File this Correction with the service manual.

☛ : Corrected Item
Section 4: Electrical Parts List (Page 54)

INCORRECT

REF. NO.	PART NO.	DESCRIPTION	VALUES
	TBD	BATTERY COVER (FOR RMT-V303)	

CORRECT

REF. NO.	PART NO.	DESCRIPTION	VALUES
☛	9-885-030-45	BATTERY COVER (FOR RMT-V303)	

Design and specifications are subject to change without notice.

DIGITAL NETWORK RECORDER

SONY®

9-965-936-91

Self Diagnosis
Supported model

SERVICE MANUAL SVR-3000 RMT-V303

US Model

CORRECTION- 2

SUBJECT: IC600 ADDED TO ELECTRICAL PARTS LIST

Correct the service manual as shown.
File this Correction with the service manual.

☛ : Corrected Item
Section 4: Electrical Parts List (Page 46)

INCORRECT

REF. NO.	PART NO.	DESCRIPTION	VALUES
	Needs to be added		

CORRECT

	REF. NO.	PART NO.	DESCRIPTION	VALUES
☛	IC600	6-702-191-01	IC BCM7020RKPB1-P21	

Design and specifications are subject to change without notice.

DIGITAL NETWORK RECORDER

SONY®

9-965-936-92